UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2022

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ______ to ______

Commission file number: 333-234741

Odyssey Semiconductor Technologies, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**84-1766761**
(State or other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

9 Brown Road
Ithaca, NY 14850
(607) 882-2754

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act: None.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of August 15, 2022, there were 12,726,911 shares of the registrant's common stock, $0.0001 par value, issued and outstanding.

TABLE OF CONTENTS

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

ODYSSEY SEMICONDUCTOR TECHNOLOGIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2022 (unaudited)	December 31, 2021
Assets		
Current Assets:		
Cash	$ 604,255	$ 2,598,213
Accounts receivable	170	6,170
Deferred expenses	61,959	7,870
Prepaid expenses and other current assets	238,708	225,260
Total Current Assets	905,092	2,837,513
Restricted cash	103,224	103,201
Property and equipment, net	1,051,237	853,290
Operating ROU Asset	614,620	—
Total Assets	$ 2,674,173	$ 3,794,004
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable and accrued expenses	$ 353,370	$ 147,947
Loan payable - short term	75,350	74,134
Lease liability - short term portion	180,353	—
Deferred revenue	75,000	10,000
Total Current Liabilities	684,073	232,081
Long-term lease liability	417,602	—
Loans payable - long term	307,935	345,459
Total liabilities	1,409,610	577,540
Commitments and contingencies	—	—
Stockholders' Equity:		
Preferred stock, $0.0001 par value, 5,000,000 shares authorized; 0 shares issued and outstanding as of June 30, 2022 and December 31, 2021	—	—
Common stock, $0.0001 par value, 45,000,000 shares authorized, 12,726,911 shares issued and outstanding as of June 30, 2022 and December 31, 2021	1,272	1,272
Additional paid-in capital	10,383,144	9,873,345
Accumulated deficit	(9,119,853)	(6,658,153)
Total Stockholders' Equity	1,264,563	3,216,464
Total Liabilities and Stockholders' Equity	$ 2,674,173	$ 3,794,004

See notes to these condensed consolidated financial statements.

ODYSSEY SEMICONDUCTOR TECHNOLOGIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	For The Three Months Ended June 30,		For The Six Months Ended June 30,	
	2022	2021	2022	2021
Revenues	$ 20,581	$ 287,153	$ 50,519	$ 518,122
Cost of Revenues	23,097	361,417	54,096	744,270
Gross Profit (Loss)	(2,516)	(74,264)	(3,577)	(226,148)
Operating Expenses:				
Research and development	647,705	466,042	1,016,889	619,079
Selling, general, and administrative	677,847	772,352	1,435,774	1,568,826
Total Operating Expenses	1,325,552	1,238,394	2,452,663	2,187,905
Loss From Operations	(1,328,068)	(1,312,658)	(2,456,240)	(2,414,053)
Other Income (Expense):				
Forgiveness of PPP loan and other income	11	3,026	2,024	213,706
Interest expense	(3,668)	(5,451)	(7,484)	(9,847)
Net Loss	$ (1,331,725)	$ (1,315,083)	$ (2,461,700)	$ (2,210,194)
Net (Loss) Income Per Share:				
Basic	$ (0.10)	$ (0.10)	$ (0.19)	$ (0.18)
Diluted	$ (0.10)	$ (0.10)	$ (0.19)	$ (0.18)
Weighted Average Number of Common Shares Outstanding:				
Basic	12,726,911	12,726,911	12,726,911	12,103,599
Diluted	12,726,911	12,726,911	12,726,911	12,103,599

See notes to these condensed consolidated financial statements.

ODYSSEY SEMICONDUCTOR TECHNOLOGIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2022 AND 2021
(Unaudited)

	Common Stock				
	Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
Balance - December 31, 2021	12,726,911	$ 1,272	$ 9,873,345	$ (6,658,153)	$ 3,216,464
Stock based compensation	—	—	51,049	—	51,049
Net loss three months ended 3/31/2022	—	—	—	(1,129,975)	(1,129,975)
Balance - March 31, 2022	12,726,911	$ 1,272	$ 9,924,394	$ (7,788,128)	$ 2,137,538
Stock based compensation	—	—	458,750	—	458,750
Net loss three months ended 6/30/2022	—	—	—	(1,331,725)	(1,331,725)
Balance - June 30, 2022	12,726,911	$ 1,272	$ 10,383,144	$ (9,119,853)	$ 1,264,563

	Common Stock				
	Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
Balance - December 31, 2020	11,429,661	$ 1,143	$ 4,046,370	$ (3,516,400)	$ 531,113
Stock based compensation	—	—	678,918	—	678,918
Exercise of stock options	45,625	4	68,434	—	68,438
Sale of shares of common stock	1,251,625	125	5,006,375	—	5,006,500
Costs of stock sale	—	—	(407,445)	—	(407,445)
Net loss three months ended 3/31/2021	—	—	—	(895,111)	(895,111)
Balance - March 31, 2021	12,726,911	$ 1,272	$ 9,392,652	$ (4,411,511)	$ 4,982,413
Stock based compensation	—	—	536,478	—	536,478
Net loss three months ended 6/30/2021	—	—	—	(1,315,083)	(1,315,083)
Balance - June 30, 2021	12,726,911	$ 1,272	$ 9,929,130	$ (5,726,594)	$ 4,203,808

See notes to these condensed consolidated financial statements.

ODYSSEY SEMICONDUCTOR TECHNOLOGIES, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	For The Six Months Ended June 30,	
	2022	**2021**
Cash Flows From Operating Activities:		
Net loss	$ (2,461,700)	$ (2,210,194)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	509,799	1,215,396
Forgiveness of PPP loan indebtedness	—	(210,680)
Depreciation and amortization	91,392	82,598
Changes in operating assets and liabilities:		
Contract assets	—	62,273
Accounts receivable	6,000	6,332
Prepaid expenses and other current assets	(13,448)	(6,288)
Deferred expenses	(54,089)	163,302
Accounts payable and accrued expenses	205,423	(42,211)
Deferred revenue	65,000	(158,467)
Total Adjustments	810,077	1,112,255
Net Cash Used In Operating Activities	(1,651,623)	(1,097,939)
Cash Flows Used In Investing Activities:		
Purchases of property and equipment	(288,883)	(21,161)
Lease of property	(16,665)	—
Net Cash Used In Investing Activities	(305,548)	(21,161)
Cash Flows From Financing Activities:		
Proceeds from sale of common stock, net of costs	—	4,599,055
Proceeds from government loans	—	193,625
Repayment of government loans	(36,764)	(12,470)
Proceeds from exercise of stock options	—	68,438
Payment of deferred offering costs	—	
Payment of deferred loan costs		
Net Cash Provided By (Used In) Financing Activities	(36,764)	4,848,648
Net Increase (Decrease) In Cash and Restricted Cash	(1,993,935)	3,729,548
Cash and Restricted Cash - Beginning Of Period	2,701,414	375,855
Cash and Restricted Cash - End Of Period	$ 707,479	$ 4,105,403
Cash and Restricted Cash Consisted of the Following:		
Cash	$ 604,255	$ 4,002,228
Restricted cash	103,224	103,175
	$ 707,479	$ 4,105,403
Supplemental Disclosures of Cash Flow Information:		
Cash paid during the year for:		
Interest	$ 7,027	$ 4,400
Income taxes	$ —	$ —
Non-cash investing and financing activities:		
Operating Lease ROU Asset	$ 693,683	$ —

See notes to these condensed consolidated financial statements.

Note 1 – Nature of Operations and Liquidity

Organization and Operations

Odyssey Semiconductor Technologies, Inc. ("Odyssey Technologies") was incorporated on April 12, 2019 under the laws of the State of Delaware. Odyssey Technologies, through its wholly-owned subsidiary, Odyssey Semiconductor, Inc. ("Odyssey Semiconductor") and Odyssey Semiconductor's wholly owned subsidiary, JR2J, LLC ("JR2J") (collectively, the "Company"), is a semiconductor device company developing high-voltage power switching components and systems based on proprietary Gallium Nitride ("GaN") processing technology.

COVID-19

The extent of the impact and effects of the recent outbreak of the coronavirus (COVID-19) on the operation and financial performance of our business will depend on future developments, including the duration and spread of the outbreak, related travel advisories and restrictions, the consequential potential of staff shortages, supply chain delays, and project development delays, all of which are highly uncertain and cannot be predicted. If demand for the Company's services or the Company's ability to service customers are impacted for an extended period, especially as it relates to major customers, our financial condition and results of operations may be materially adversely affected.

Liquidity and Financial Condition

As of June 30, 2022, the Company had a cash balance, working capital and accumulated deficit of approximately $600,000, $221,000 and $9,100,000, respectively. During the six months ended June 30, 2022, the Company generated a net loss of approximately $2,462,000.

The Company believes its current cash on hand will not be sufficient to meet its operating obligations and capital requirements for at least twelve months from the issuance of these financial statements. This raises substantial doubt about our ability to continue as a going concern. Therefore, the Company will need to raise further capital through the sale of additional equity or debt securities or other debt instruments to support its future operations. The Company has engaged with an investment bank to assist with the fund raise; however, there can no assurance that a financing can be completed on terms acceptable to the Company. The Company has also taken preliminary steps to file a registration statement on Form S-1 with the SEC for a proposed public offering, but there is no assurance that the offering will be successful. The Company received $1.25 million proceeds on a bridge financing in August 2022 – See Note 12.

The Company's operating needs include the planned costs to operate its business, including amounts required to fund working capital and capital expenditures. The Company's future capital requirements and the adequacy of its available funds will depend on many factors, including the Company's ability to successfully commercialize its products and services, competing technological and market developments, and the need to enter into collaborations with other companies or acquire other companies or technologies to enhance or complement its product and service offerings. There is also no assurance that the amount of funds the Company might raise will enable the Company to complete its development initiatives or attain profitable operations. If the Company is unable to obtain additional financing on a timely basis, it may have to curtail its development, marketing and promotional activities, which would have a material adverse effect on the Company's business, financial condition and results of operations, and ultimately, the Company could be forced to discontinue its operations and liquidate.

Note 2 - Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, such statements include all adjustments (consisting only of normal recurring items) which are considered necessary for a fair presentation of the unaudited condensed consolidated financial statements of the Company as of June 30, 2022 and for the three and six months ended June 30, 2022 and 2021. The results of operations for the three and six months ended June 30, 2022 are not necessarily indicative of the operating results for the full year ending December 31, 2022 or any other period. These unaudited condensed consolidated financial statements should be read in conjunction with the audited financial statements and related disclosures as of December 31, 2021 and for the year then ended which have been previously filed.

Use of Estimates

Preparation of financial statements in conformity with U.S. GAAP requires management to make estimates, judgments and assumptions that affect the amounts reported in the financial statements and the amounts disclosed in the related notes to the financial statements. The Company's significant estimates used in these financial statements include, but are not limited to, fair value calculations for equity securities, stock-based compensation, the collectability of receivables, the recoverability and useful lives of long-lived assets, and the valuation allowance related to the Company's deferred tax assets. Certain of the Company's estimates could be affected by external conditions, including those unique to the Company and general economic conditions. It is reasonably possible that these external factors could have an effect on the Company's estimates and could cause actual results to differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents in the financial statements. As of June 30, 2022 and December 31, 2021, the Company had no cash equivalents. The Company has cash on deposits in several financial institutions which, at times, may be in excess of Federal Deposit Insurance Corporation ("FDIC") insurance limits. The Company has not experienced losses in such accounts and periodically evaluates the creditworthiness of its financial institutions. The Company reduces its credit risk by placing its cash and cash equivalents with major financial institutions.

Restricted Cash

Restricted cash was comprised of cash held as a security deposit in connection with the Company's operating lease. See Note 8 – Commitments and Contingencies - Operating Lease for additional details.

Deferred Expenses

Deferred expenses consist of labor, materials and other costs that are attributable to customer contracts that the Company has not completed its performance obligation under the contract and, as a result, has not recognized revenue. As of June 30, 2022 and December 31, 2021, deferred expenses were approximately $62,000 and $8,000, respectively.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation using the straight-line method over their estimated useful lives, once the asset is placed in service. Expenditures for maintenance and repairs, which do not extend the economic useful life of the related assets, are charged to operations as incurred, and expenditures which extend the economic life are capitalized. Leasehold improvements are depreciated over the lesser of their estimated useful lives or the remaining term of their respective lease. When assets are retired or otherwise disposed of, the costs and related accumulated depreciation or amortization are removed from the accounts and any gain or loss on disposal is recognized in the statement of operations for the respective period.

The Company's long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount.

The estimated useful lives of property and equipment are as follows:

Schedule of estimated useful lives of property and equipment

Asset	Useful lives (years)
Computer and office equipment	5
Lab equipment	5
Leasehold improvements	shorter of useful life or lease term
Machinery	7-15
Furniture	7

Offering Costs

Deferred offering costs, which primarily consist of direct, incremental professional fees incurred in connection with a debt or equity financing, are capitalized as non-current assets on the consolidated balance sheets. Once the financing closes, the Company reclassifies such costs as either discounts to notes payable or as a reduction of proceeds received from equity transactions so that such costs are recorded as a reduction of additional paid-in capital. If the completion of a contemplated financing was deemed to be no longer probable, the related deferred offering costs would be charged to general and administrative expense in the consolidated financial statements.

Leases

In February 2016, the Financial Accounting Standards Board (the "FASB") established Accounting Standards Codification ("ASC") Topic 842, "Leases", by issuing Accounting Standards Update ("ASU") No. 2016-02, which requires lessees to now recognize operating leases on the balance sheet and disclose key information about leasing arrangements. ASC Topic 842 was subsequently amended by ASU No. 2018-01, *Land Easement Practical Expedient for Transition to Topic 842; ASU No. 2018-10, Codification Improvements to Topic 842, Leases; and ASU No. 2018-11, Targeted Improvements*. The new standard establishes a right-of-use ("ROU") model that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement. Lessor accounting under the new standard is substantially unchanged. Additional qualitative and quantitative disclosures are also required. The Company adopted the new standard on January 1, 2022 using the modified retrospective transition method, which applies the provisions of the standard at the effective date without adjusting the comparative periods presented. The Company adopted the following practical expedients and accounting policies elections related to this standard:

- Short-term lease accounting policy election allowing lessees to not recognize ROU assets and liabilities for leases with a term of 12 months or less;
- The option to not separate lease and non-lease components in the Company's lease contracts; and
- The package of practical expedients applied to all of its leases, including (i) not reassessing whether any expired or existing contracts are or contain leases, (ii) not reassessing the lease classification for any expired or existing leases, and (iii) not reassessing the capitalization of initial direct costs for any existing leases.

Adoption of this standard resulted in the recognition of operating lease right-of-use assets and corresponding lease liabilities of approximately $694,000 on the consolidated balance sheet as of January 1, 2022. Disclosures related to the amount, timing and uncertainty of cash flows arising from leases are included in Note 8, Leases.

Revenue Recognition

The Company recognizes revenue under ASC Topic 606, "Revenue from Contracts with Customers" ("ASC 606"). The Company determines revenue recognition through the following steps:

- Step 1: Identify the contract with the customer;
- Step 2: Identify the performance obligations in the contract;
- Step 3: Determine the transaction price;
- Step 4: Allocate the transaction price to the performance obligations in the contract; and
- Step 5: Recognize revenue when the company satisfies a performance obligation.

A majority of the Company's revenues are generated from contracts with customers that require it to design, develop, manufacture, test and integrate complex equipment and to provide engineering and technical services according to customer specifications. These contracts are often priced on a time and material type basis. Revenues on time and material type contracts are generally recognized in each period based on the amount billable to the customer which is based on direct labor hours expended multiplied by the contractual fixed rate per hour, plus the actual costs of materials and other direct non-labor costs.

The timing of the Company's revenue recognition may differ from the timing of payment by its customers. A receivable is recorded when revenue is recognized prior to payment and the Company has an unconditional right to payment. Alternatively, when payment precedes the provision of the related services, the Company records deferred revenue until the performance obligations are satisfied. Contract assets are comprised of unbilled contract receivables related to revenues earned but not yet invoiced to customers.

During the six months ended June 30, 2022 and 2021, there was no revenue recognized from performance obligations satisfied (or partially satisfied) in previous periods.

The Company generated revenue from government contracts that reimburse the Company for certain allowable costs for funded projects. Such projects were completed in 2021. For contracts with government agencies, when the Company has concluded that it is the principal in conducting the research and development expenses and where the funding arrangement is considered central to the Company's ongoing operations, the Company classifies the recognized funding received as revenue. The Company has determined that revenue generated from government grants is outside the scope of ASC 606 and, as a result, the Company recognizes revenue upon incurring qualifying, reimbursable expenses. During the six months ended June 30, 2022 and 2021, the Company recognized approximately $0 and $418,000, respectively, of grant revenue.

Research and Development

Research and development expenses are charged to operations as incurred.

Stock-Based Compensation

The Company measures the cost of services received in exchange for an award of equity instruments based on the fair value of the award. The fair value of the award is measured on the grant date. The fair value amount is then recognized over the period during which services are required to be provided in exchange for the award, usually the vesting period. Upon the exercise of an award, the Company issues new shares of common stock out of its authorized shares.

The risk-free interest rate was determined from the implied yields from U.S. Treasury zero-coupon bonds with a remaining term consistent with the expected term of the instrument being valued. Option forfeitures are accounted for at the time of occurrence. The expected term used is the estimated period of time that warrants or options are expected to be outstanding. The Company utilizes the "simplified" method to develop an estimate of the expected term of "plain vanilla" employee options. For investor warrants and non-employee options, the expected term used is the contractual life of the instrument being valued. The Company uses its trading history to support its historical volatility calculations.

Net (Loss) Income per share of Common Stock

Basic net (loss) income per share of common stock is computed by dividing net (loss) income by the weighted average number of vested shares of common stock outstanding during the period. Diluted net income per share of common stock is computed by dividing net income by the weighted average number of common and dilutive common-equivalent shares outstanding during each period.

The following shares were excluded from the calculation of weighted average dilutive shares of common stock because their inclusion would have been anti-dilutive:

	As of June 30,	
	2022	2021
Warrants	245,696	245,696
Options	2,048,246	3,550,031
Total	2,293,942	3,795,727

Income Taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of items that have been included or excluded in the financial statements or tax returns. Deferred tax assets and liabilities are determined on the basis of the difference between the tax basis of assets and liabilities and their respective financial reporting amounts ("temporary differences") at enacted tax rates in effect for the years in which the temporary differences are expected to reverse. The Company has recorded a full valuation allowance against its deferred tax assets for all periods, due to the uncertainty of future utilization.

The Company utilizes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Management has evaluated and concluded that there were no material uncertain tax positions requiring recognition in the Company's financial statements as of June 30, 2022 and December 31, 2021. The Company does not expect any significant changes in its unrecognized tax benefits within twelve months of the reporting date. The Company's policy is to classify assessments, if any, for tax related interest as interest expense and penalties as selling, general and administrative expenses in the consolidated statements of operations.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We base our estimates and judgments on historical experience, current economic and industry conditions and on various other factors that are believed to be reasonable under the circumstances. This forms the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that full consideration has been given to all relevant circumstances that we may be subject to, and the consolidated financial statements accurately reflect our best estimate of the results of operations, financial position and cash flows for the periods presented.

On an ongoing basis, we evaluate our estimates and judgments for all assets and liabilities, including those related to the fair value of stock options for determination of the stock-based compensation expense. The amount of stock based compensation has been a significant expense over the six months ended June 30, 2022 and 2021. The assumptions that go into the Black-Scholes calculation are the major driver of the calculation of the fair value of the stock options at the date of grant. The major assumption of volatility is based upon historical data, and the majority of the other assumptions used in the Black Scholes computation is based upon the terms of the specific stock option grant.

Revenues and cost of sales are important metrics in demonstrating the completion of projects and shipment of products to customers, and the profitability of such revenues. Accordingly, revenue recognition is a critical accounting policy. The timing of the Company's revenue recognition may differ from the timing of payment by its customers. A receivable is recorded when revenue is recognized prior to payment and the Company has an unconditional right to payment. Alternatively, when payment precedes the provision of the related services, the Company records deferred revenue until the performance obligations are satisfied. Contract assets are comprised of unbilled contract receivables related to revenues earned but not yet invoiced to customers. We review the status of each project at each period end and determine whether the earnings process is complete and the revenue and costs of sales should be recognized.

Recently Issued Accounting Standards

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-13, "Financial Instruments - Credit Losses". This update requires immediate recognition of management's estimates of current expected credit losses ("CECL"). Under the prior model, losses were recognized only as they were incurred. The new model is applicable to all financial instruments that are not accounted for at fair value through net income. The standard is effective for fiscal years beginning after December 15, 2022 for public entities qualifying as small reporting companies. Early adoption is permitted. The Company is currently assessing the impact of this update on our consolidated financial statements and do not anticipate a significant impact.

Note 3 - Prepaid Expenses and Other Current Assets

Prepaid expenses consisted of the following:

	June 30, 2022	December 31, 2021
Insurance	$ 60,294	$ 30,666
Legal Fees	—	16,180
Deposit for equipment purchase	25,288	25,288
Deposit for leased equipment purchase (Note 11)	153,126	153,126
Total	**$ 238,708**	**$ 225,260**

In December 2021, the Company made a deposit of $153,126 to purchase equipment (included in prepaid expenses in the accompanying balance sheet). The remainder of the purchase price was to be financed through a long-term lease. Terms and finalization of the lease has not yet occurred, and the Company has requested a refund of its deposit from the initial lessor who did not follow through with lease financing based on their original lease proposal.

Note 4 – Property and Equipment

Property and equipment consisted of the following:

	June 31, 2022	December 31, 2021
Computer and office equipment	$ 2,807	$ 2,807
Lab equipment	15,606	15,606
Furniture	43,705	43,705
Leasehold improvements	687,632	450,374
Machinery	679,265	627,640
Subtotal	1,429,015	1,140,132
Accumulated Depreciation	(377,778)	(286,842)
Property and Equipment, net	**$ 1,051,237**	**$ 853,290**

Depreciation and amortization expense related to property and equipment was approximately $91,000 and $82,000 for the six months ended June 30, 2022 and 2021, respectively.

Note 5 - Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following:

	June 30, 2022	December 31, 2021
Accounts payable	$ 212,864	$ 67,970
Accrued expenses	106,836	29,994
Credit cards payable	25,266	36,690
Accrued interest and other	8,404	13,293
Total	**$ 353,370**	**$ 147,947**

Note 6 – Stockholders' Equity

Authorized Capital

The Company is authorized to issue 45,000,000 shares of common stock, $0.0001 par value per share, and 5,000,000 shares of preferred stock, $0.0001 par value per share. The holders of the Company's common stock are entitled to one vote per share. No preferred shares have been issued as of the date hereof.

Common Stock Transactions

In March 2021, the Company sold 1,251,625 shares of common stock at $4.00 per share for gross proceeds of $5,006,500 in connection with a private placement of securities. The costs associated with such issuance were $407,445 in cash and warrants to purchase 89,730 shares of Common Stock of the Company with a term of 5 years and an exercise price of $4.00 per share. An aggregate of $480,000 of proceeds were raised from related parties (including an aggregate of $430,000 from Alex Behfar's family member, Richard Brown, Richard Ogawa and James Shealy), representing approximately 10% of the total gross proceeds.

Note 7 – Equity Compensation Plan

On June 18, 2019, the Board of Directors and a majority of the Company's shareholders, respectively, approved the 2019 Equity Compensation Plan (the "2019 Plan"). The 2019 Plan provides for the issuance of incentive stock options, non-statutory stock options, rights to purchase common stock, stock appreciation rights, restricted stock, restricted stock, performance shares and performance units to employees, directors and consultants of the Company and its affiliates. The 2019 Plan requires the exercise price of stock options to be not less than the fair value of the Company's common stock on the date of grant, or 110% of fair value in the case of incentive options granted to a ten-percent stockholder.

On March 11, 2020, the Company granted the following 10 ten-year options to purchase shares of common stock at an exercise price of $1.50 per share to the Company's then newly appointed Executive Chairman and Acting Chief Executive Officer under the 2019 Plan: (i) an option to purchase 965,850 shares of common stock that vests ratably on a monthly basis over two years and (ii) an option to purchase 321,950 shares of common stock that vests based on performance criteria to be mutually agreed to by the Board and the executive. The grant was reduced to 500,000 options, including 375,000 options and 125,000 options respectively under the two categories, due to limitations under the 2019 Plan. The terms of the 125,000 performance-based options were established in the quarter ended December 31, 2021. The terms of the performance-based options were met during the quarter ended March 31, 2021.

From June 1 to June 22, 2021, the Company granted five and 10 ten-year options to purchase 388,246 shares of common stock at an exercise price of $2.90 to $3.93 per share to employees, an advisory board member and board members under the 2019 Plan that vest over two to five years.

On September 22, 2021, upon the resignation of our then Chief Executive Officer and Chairman, a total of 1,911,160 unvested options that he received on September 25, 2019, March 11, 2020, July 16, 2020 and September 22, 2020 were forfeited as of such date. On such date, the Company also provided the acceleration of 25,000 unvested stock options issued on September 25, 2019, which were to vest as of September 25, 2021. The impact of the modification of the stock option was not material.

On December 30, 2021, the Company granted five and 10 ten-year options to purchase 445,000 shares of common stock at an exercise price of $1.77 per share to employees, an advisory board member and board members under the 2019 Plan that vest over one to four years.

On February 9, 2022, subject to the shareholders' approval, the Board of Directors approved that the aggregate number of shares authorized for issuance as awards under the 2019 Plan shall be 4,600,000 shares plus an annual increase on the first day of each fiscal year for the rest of the term of the Plan in an amount equal to the lesser of (i) 5% of the outstanding shares of common stock of the Company on the last day of the immediately preceding year or (iii) an amount determined by the Board of Directors.

On April 26, 2022, the Company granted to Mr. Davidson an option to purchase 650,000 shares of the Company's common stock at $1.66 per share. The option will vest at the rate of 25% per year on the anniversary date from the first day of his employment starting from April 1, 2023. The option will be subject to acceleration in vesting in connection with the occurrence of a change of control event during the term of Mr. Davidson's employment.

The stock option activity from January 1, 2021 through June 30, 2022 is as follows:

	Shares	Weighted-Average Exercise Price per share	Weighted-Average Remaining Contractual Life (years)
Balance, December 31, 2020	3,257,410	$ 1.50	9.1
Options granted	833,246	2.67	6.7
Options exercised	(45,625)	1.50	—
Options expired	(735,625)	1.50	—
Options forfeited	(1,911,160)	1.50	—
Balance, December 31, 2021	1,398,246	2.20	6.3
Options granted	650,000	1.66	9.8
Balance, June 30, 2022	2,048,246	2.03	6.9
Vested shares at June 30, 2022	648,145	$ 1.99	1.9

The following table summarizes the outstanding options at June 30, 2022 by exercise price.

Exercise price		Outstanding options	Exercisable options
$	1.66	650,000	0
$	1.50	565,000	460,000
$	1.77	445,000	54,583
$	3.93	268,000	106,000
$	2.90	70,246	17,562
$	3.55	50,000	10,000
		2,048,246	648,145

At June 30, 2022, the Company has 2,236,129 options available to grant under the 2019 Plan.

The Company has estimated the fair value of all stock option awards as of the date of grant by applying the Black-Scholes option-pricing model. In applying the Black-Scholes option pricing model, the Company used the following weighted average assumptions for issuances during the six months ended June 30, 2022 and 2021:

	2022	2021
Risk-free interest rate	2.77%	1.1%
Expected term	7.0 years	7.5 years
Expected volatility	100.4%	81%
Expected dividends	0	0
Grant date fair value of common stock	$ 1.38/share	$ 2.45 share

During the six months ended June 30, 2022, the Company recognized stock-based compensation expense related to stock options of approximately $510,000, of which approximately $181,000 was recorded as part of research and development expenses and $312,000 was included within general and administrative expenses and $17,000 of which was included within cost of revenues on the consolidated statements of operations. See Note 11 for further discussion. During the six months ended June 30, 2021, the Company recognized stock-based compensation expense related to stock options of approximately $1,215,000 ($1,144,000 of which was included within general and administrative expenses, $42,000 of which was included in research and development expenses, $29,000 of which was included within cost of revenues).

As of June 30, 2022, there was unamortized stock-based compensation of approximately $1,900,000 which the Company expects to recognize over approximately 3.7 years. At June 30, 2022, the intrinsic value of outstanding and vested stock options was nil.

Note 8 - Commitments and Contingencies

Litigations, Claims, and Assessments

From time to time, the Company is involved in various disputes, claims, liens and litigation matters arising out of the normal course of business which could result in a material adverse effect on the Company's combined financial position, results of operations or cash flows. Liabilities for loss contingencies arising from claims, assessments, litigation, fines and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount of the assessment can be reasonably estimated. As of June 30, 2022 and June 30, 2021, the Company had no outstanding claims or litigation and had no liabilities recorded for loss contingencies.

Operating Lease

On August 21, 2019, the Company entered into a lease for a 10,000 square foot facility consisting of lab and office space. The lease requires monthly payments of $16,667 and expires on November 30, 2025. The Company has arranged for a $100,000 letter of credit in favor of the landlord in lieu of a security deposit, which was included as restricted cash on the consolidated balance sheet as of June 30, 2022 and December 31, 2021.

The assets and liabilities from operating leases are recognized at the lease commencement date based on the present value of remaining lease payments over the lease term using the Company's incremental borrowing rates or implicit rates, when readily determinable. Short-term leases, which have an initial term of 12 months or less, are not recorded on the balance sheet. The Company's operating leases do not provide an implicit rate that can readily be determined. Therefore, the Company uses a discount rate based on its estimated incremental commercial borrowing rate,

The following table presents information about the amount and timing of liabilities arising from the Company's operating and finance leases as of June 30, 2022 (in thousands):

Maturity of Lease Liabilities		**Operating Lease Liabilities**
2022 (remainder of year)	$	100,000
2023		200,000
2024		200,000
2025		183,337
Total undiscounted operating lease payments	$	683,337
Less: Imputed interest		85,382
Present value of operating lease liabilities	$	597,955
Short-term portion		180,353
Long term portion	$	417,602
Remaining lease term in years		3.4
Discount rate		6.50%

The Company incurred lease expense for its operating lease of approximately $100,000 for the six months ended June 30, 2022 and 2021.

The Right of Use Asset at June 30, 2022 of $614,620 is being amortized over the lease term.

Employment Agreement

On April 18, 2022, Mark Davidson was appointed as Chief Executive Officer of the Company. In connection with Mr. Davidson's appointment as Chief Executive Officer of the Company, the Company agreed to pay Mr. Davidson an annual cash compensation of $300,000. For 2022, Mr. Davidson will be eligible for an annual target bonus of up to $150,000 that will be prorated for nine (9) months (i.e. $112,500) based on his achievements of performance goals to be finalized and approved by the Board of Directors within the first two months of his employment. Such annual bonus will be paid in stock compensation until such time that the Company has sufficient cash flow. His eligibility for future bonuses will be determined by the Board of Directors in accordance with the Company's future bonus plans and programs.

Note 9 – Concentrations

During the six months ended June 30, 2022, revenues were generated from two customers. At June 30, 2022, substantially all deferred costs and deferred revenues are attributable to one customer contract.

During the six months ended June 30, 2021, substantially all revenues were generated from two governmental customers pursuant to our contracts with such entities and amounted to approximately 81% of total revenues. Such contracts were completed during 2021.

Note 10 – Government Loans

Paycheck Protection Program Loans

On May 1, 2020, the Company received loan proceeds in the amount of approximately $211,000 under the Paycheck Protection Program (“PPP”). The PPP, established as part of the Coronavirus Aid, Relief and Economic Security Act, as amended (“CARES Act”), provides for loans to qualifying businesses for amounts up to 2.5 times of the average monthly payroll expenses of such qualifying business. The loans and accrued interest are forgivable after certain time periods further defined in the CARES Act (the “Covered Period”) as long as the borrower uses the loan proceeds for eligible purposes, including payroll, benefits, rent and utilities, and maintains its payroll levels. The amount of loan forgiveness will be reduced if the borrower terminates employees or reduces salaries during the Covered Period. The outstanding balance was included in long-term loans payable at December 31, 2021. On March 6, 2021, the entire loan balance was forgiven.

On February 24, 2021, the Company received $193,625 pursuant to a promissory note issued under the Paycheck Protection Program Part 2 (“PPP2”). Interest was to accrue at 1% per annum and the note is payable in 60 monthly installments of $3,300 commencing May 2022; however, on November 15, 2021, the entire loan balance was forgiven.

Economic Injury Disaster Loan Advance

On May 1, 2020, the Company received an advance in the amount of $10,000 from the U.S. Small Business Administration (“SBA”) under the Economic Injury Disaster Loan (“EIDL”) program administered by the SBA, which program was expanded pursuant to the CARES Act. Such advance amount will reduce the Company’s PPP loan forgiveness amount described above. The Company received an additional $138,900 under this program on August 30, 2020. The loan is payable in monthly payments of $678 including interest at 3.75% payable over 30 years.

Tomkins County Area Development Loan

On May 27, 2020, the Company received loan proceeds in the amount of $50,000 from the Tomkins County Area Development (“TCAD”) Emergency Relief Loan Fund. The loan matures after four years and bears interest in the amount of 2.5% per annum, with one year of no interest or principal payments, followed by three years of monthly payments of principal and interest in the amount of $1,443 per month. The loan is collateralized by certain assets of the Company.

Equipment Loans

On August 20, 2020, the Company received a loan of $100,000 from Broome County Industrial Development Agency (5 year facility, 2.5% annual interest rate, monthly payment of $1,775); on September 1, 2020, the Company received a loan of $100,000 from Southern Tier Region Economic Development Corporation (5 year facility, 5.0% annual interest rate, monthly payment of $2,072) ; and on September 10, 2020, the Company received a loan of $75,000 from TCAD (5 year facility, 2.5% annual interest rate, monthly payment of $1,331). These loans were used to acquire equipment used in the laboratory, and are secured by the underlying assets of the Company.

The loans are summarized as follows:

	June 30, 2022	December 31, 2021
Principal outstanding	$ 386,325	$ 423,089
Deferred loan costs, net of amortization	(3,040)	(3,496)
Subtotal	383,285	419,593
Less current portion	(75,350)	(74,134)
Total long term portion	$ 307,935	$ 345,459

Interest expense on the above debt instruments was approximately $7,000 and $10,000 for the six months ended June 30, 2022 and 2021, respectively.

Note 11 – Revision of stock compensation expense

During the second quarter of 2022, the Company identified certain adjustments required to correct balances within stock-based compensation, which is included in operating expenses in the accompanying consolidated statements of operations, related to employees, directors and consultants (see Note 7 – Equity Compensation Plan) recorded during the three-month periods from June 2021 to March 2022. The Company had incorrectly calculated the amortization of the stock-based compensation for the periods from June 2021 to March 2022. The error discovered resulted in an understatement of the stock-based compensation expense for the periods June 2021 to March 2022 summarized as follows:

	As previously reported	adjustment	As if restated
Three months ended 6/30/2021			
Gross profit (loss)	(74,264)	(369)	(74,633)
Operating expenses	1,238,394	24,253	1,262,647
Operating loss	(1,312,658)	24,622	(1,288,036)
Net loss	(1,315,083)	(24,622)	(1,339,705)
Additional paid in capital	9,929,130	24,622	9,953,752
Accumulated Deficit	(5,726,594)	(24,622)	(5,751,216)
Six months ended 6/30/2021			
Gross profit (loss)	(226,148)	(369)	(226,517)
Operating expenses	2,187,905	24,253	2,212,158
Operating loss	(2,414,053)	24,622	(2,389,431)
Net loss	(2,210,194)	(24,622)	(2,234,816)
Additional paid in capital	9,929,130	24,622	9,953,752
Accumulated Deficit	(5,726,594)	(24,622)	(5,751,216)
Three months ended 9/30/2021			
Gross profit (loss)	126,983	(1,173)	125,810
Operating expenses	858,099	77,034	935,133
Operating loss	(731,116)	78,207	(652,909)
Net loss	(710,663)	(78,207)	(788,870)
Additional paid in capital	9,837,157	78,207	9,915,364
Accumulated Deficit	(6,123,934)	(78,207)	(6,202,141)
Nine months ended 9/30/2021			
Gross profit (loss)	(99,165)	(1,542)	(100,707)
Operating expenses	2,732,681	101,287	2,833,968
Operating loss	(2,831,846)	102,829	(2,729,017)
Net loss	(2,607,534)	(102,829)	(2,710,363)
Additional paid in capital	9,837,157	102,829	9,939,986
Accumulated Deficit	(6,123,934)	(102,829)	(6,226,763)
Year ended 12/31/2021			
Gross profit (loss)	(83,257)	(2,431)	(85,688)
Operating expenses	3,474,593	159,625	3,634,218
Operating loss	(3,557,850)	162,056	(3,395,794)
Net loss	(3,141,753)	(162,056)	(3,303,809)
Additional paid in capital	9,873,345	162,056	10,035,401
Accumulated Deficit	(6,658,153)	(162,056)	(6,820,209)
Three months ended 3/31/2022			
Gross profit (loss)	(1,061)	(1,507)	(2,568)
Operating expenses	1,127,111	98,961	1,226,072
Operating loss	(1,128,172)	100,468	(1,027,704)
Net loss	(1,129,975)	(100,468)	(1,230,443)
Additional paid in capital	9,924,394	262,523	10,186,917
Accumulated Deficit	(7,788,128)	(262,523)	(8,050,651)

Based upon an analysis of Accounting Standards Codification 250 “accounting Changes and Error Corrections (ASC 250), U.S. Securities and Exchange Commission (“SEC”) Staff Accounting Bulletin (“SAB”) No. 99, “Materiality” and SAB No. 108, “Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements” (“SAB 108”), the Company determined this error was immaterial to the previously-issued condensed consolidated financial statements, and as such no restatement was necessary. Correcting prior-period financial statements for such immaterial misstatements does not require previously filed reports to be amended. Accordingly, the misstatement was corrected in the period ended June 30, 2022.

For the three and six months ended June 30, 2022, correction of this error increased our stock-based compensation expense, total operating expenses and net loss for periods through March 31, 2022 by $262,523. The stock-based compensation for the quarter ended June 30, 2022 decreased from $226,250 to $196,227. Loss per share increased in the three and six months ended June 30, 2021 by $0.01 in both periods. Further, additional paid in capital and accumulated deficit at June 30, 2022 also increased by $262,523.

Note 12 - Subsequent Events

The Company has evaluated events that have occurred after the balance sheet and through August 15, 2022. Based upon the evaluation, the Company did not identify any recognized or non-recognized subsequent events that would have required adjustment or disclosure in the financial statements, except as follows:

On August 8, 2022, the Company issued a secured convertible promissory note in the amount of $1,250,000 (the “Promissory Note”) to a trust of which the Company’s Chairman, John Edmunds, is the trustee, pursuant to certain Subscription Agreement (the “Subscription Agreement”) and Registration Rights Agreement (the “Registration Rights Agreement”).

The Promissory Note was issued as part of a private placement (the “Offering”) for sale up to $3,750,000 of secured convertible promissory notes (collectively, the “Promissory Notes”) for a period until August 15, 2022, unless extended at the option of the Company in its sole discretion for a period of thirty (30) business days.

The Promissory Notes bear interest at a rate of ten percent (10%) per annum, on a non-compounding basis, and are due and payable on the earlier of (i) the date upon which the Promissory Notes are converted into equity securities of the Company, or (ii) at maturity in twelve (12) months. All interest due shall be paid in shares of the Company’s common stock, which shall be valued at a price equal to the average of the last 20 trading days’ closing price of the Company’s common stock, commencing on the date immediately preceding the date of conversion for purposes of the interest computation. The Promissory Notes may be convertible anytime at the discretion of the holders into shares of common stock of the Company at a price equal to the average of the last 20 trading days’ closing price, or automatically converted upon the closing of a public offering of the Company’s common stock with aggregate proceeds of at least $5 million at a 15% discount to the per share public offering price.

Pursuant to the Registration Rights Agreement, the Company agreed to file a registration statement to register the resale of the shares of common stock issuable upon the conversion of the Promissory Notes within 60 calendar days after the final closing of the Offering and cause the registration statement to be declared effective by the Securities and Exchange Commission within 90 calendar days after the filing of the registration statement. In addition, the Company agrees to keep such registration statement effective for a period of two (2) years after its effective date or for such shorter period ending on the date on which all securities registered thereunder have been sold.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and the related notes and the other financial information included elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this prospectus, particularly those under "Risk Factors." Dollars in tabular format are presented in thousands, except per share data, or otherwise indicated.

OVERVIEW

We are a semiconductor device company developing revolutionary high-voltage power switching components and systems based on proprietary Gallium Nitride (GaN) processing technology. The premium power switching device market, which is described as applications where silicon-based (Si) systems perform insufficiently, is projected to reach over $3.5 billion by 2025 and is currently dominated by the semiconductor material silicon carbide (SiC). GaN-based systems outperform Si and SiC based systems in every way due to the superior material properties of GaN. However, the existing GaN products on the market use a lateral structure, limiting their ability to compete with SiC in the most valuable opportunities. Vertical GaN devices have, to-date proven difficult to process using standard semiconductor processing methods that are used to create Si and SiC based devices. We have developed a novel processing modification that allows GaN to be processed in a manner that for the first time, makes high voltage GaN power switching devices viably manufacturable. Our mission is to disrupt the rapidly growing premium power switching device market using our newly developed GaN high voltage power transistor for switching applications.

RECENT DEVELOPMENTS

During the second quarter of 2022, we validated our approach for building high-voltage GaN power switches, and will be building high-power, high-voltage prototypes in Q3 and Q4 for internal evaluation and initial customer sampling.

On April 18, 2022, Mark Davidson was appointed as Chief Executive Officer of the Company. In connection with Mr. Davidson's appointment as Chief Executive Officer of the Company, the Company agreed to pay Mr. Davidson an annual cash compensation of $300,000. For 2022, Mr. Davidson will be eligible for an annual target bonus of up to $150,000 that will be prorated for nine (9) months (i.e. $112,500) based on his achievements of performance goals to be finalized and approved by the Board of Directors within the first two months of his employment. Such annual bonus will be paid in stock compensation until such time that the Company has sufficient cash flow. His eligibility for future bonuses will be determined by the Board of Directors in accordance with the Company's future bonus plans and programs. In addition, the Company granted to Mr. Davidson an option to purchase 650,000 shares of the Company's common stock at $1.66 per share.. The option will vest at the rate of 25% per year on the anniversary date from the first day of his employment starting from April 1, 2023. The option will be subject to acceleration in vesting in connection with the occurrence of a change of control event during the term of Mr. Davidson's employment.

COMPONENTS OF OUR RESULTS OF OPERATIONS

Revenues

Our revenues are derived from contracts with customers that require us to design, develop, manufacture, test and integrate complex equipment and to provide engineering and technical services according to customer specifications. These contracts are often priced on a time and material type basis. Revenues on time and material type contracts are generally recognized in each period based on the amount billable to the customer which is based on direct labor hours expended multiplied by the contractual fixed rate per hour, plus the actual costs of materials and other direct non-labor costs. We bill customers based upon contractual terms, and accordingly, we have deferred revenues and contract assets depending upon whether we can bill in advance of earnings or in arrears, respectively.

Cost of Revenues

Cost of revenues consist of material, labor, a portion of occupancy expenses, and other expenses directly related to our revenue contracts.

Research and Development

Research and development includes expenses, primarily material, labor, a portion of occupancy expenses, and other expenses incurred in connection with the research and development of certain exploratory projects. Research and development expenses are expensed as they are incurred.

Selling, General, and Administrative

Selling, general, and administrative expenses consist of salaries, payroll taxes and other benefits, legal and professional fees, stock-based compensation, rent and office expenses, marketing and travel and other costs associated with our operation.

Other Income

Other income consists primarily of interest income on cash balances, and other miscellaneous items. In the first six months of 2021, this category also includes the forgiveness of the PPP loan.

RESULTS OF OPERATIONS

Six months ended June 30, 2022 Compared with Six months ended June 30, 2021

	For The Six Months Ended Jun 30, 2022	For The Six Months Ended Jun 30, 2021	Change	Change %
Revenues	$ 50,519	$ 518,122	$ (467,603)	-90%
Cost of Revenues	54,096	744,270	(690,174)	-93%
Gross (Loss) Profit	(3,577)	(226,148)	222,571	-98%
Operating Expenses:				
Research and development	1,016,889	619,079	397,810	64%
Selling, general, and administrative	1,435,774	1,568,826	(133,052)	-8%
Total Operating Expenses	2,452,663	2,187,905	264,758	12%
(Loss) Income From Operations	(2,456,240)	(2,414,053)	(42,187)	2%
Other Income:				
Other income	2,024	213,706	(211,682)	-99%
Interest expense	(7,484)	(9,847)	2,363	-24%
Net (Loss) Income	$ (2,461,700)	$ (2,210,194)	$ (251,506)	11%

Overview

The following table presents certain information from the condensed consolidated statements of operations:

Revenues

Revenues for the six months ended June 30, 2022 and 2021 were approximately $50,000 and $518,000, respectively, which represented a decrease of $468,000, or 90%. We had two commercial customers as of June 30, 2022. For the six months ended June 30, 2021, we recognized revenue under two of our completed government contracts, which amounted to $418,000. The timing of revenue recognition is driven by the completion of specified deliverables and the billing of time and materials over periods of time. Accordingly, the recognition of revenue for these contracts will vary from time to time.

Cost of Revenues

Cost of revenues for the six months ended June 30, 2022 and 2021 were approximately $54,000 and $744,000, respectively, which represented a decrease of $690,000, or 93%. The base salary, facility and equipment usage fees to operate the fabrication facility during the 2022 and 2021 periods are relatively consistent and allocated between research and development and cost of revenues based upon the specific projects worked on during the period. We are currently focusing our resources on building our internal technology and have a couple of small customer pilot projects related to such technology. We have operated at a gross loss for the past year as our revenues are not yet significant to cover our fixed costs of the facility. We also incurred additional unrecoverable costs in the first half of 2021 as we completed our government contracts.

Research and Development

Research and development expenses for the six months ended June 30, 2022 and 2021 were approximately $1,017,000 and $619,000, respectively, which represented an increase of $398,000, or 64%. The increase was primarily attributable to utilization of the facility employees, equipment usage costs and general lab supplies on research and development projects vs. customer assignments.

General and Administrative

Selling, general, and administrative expenses for the six months ended June 30, 2022 and 2021 were approximately $1,436,000 and $1,569,000, respectively, which represented a decrease of $133,000, or 8%. The decrease was primarily attributable to a decrease in stock-based compensation of $833,000 primarily resulting from the performance criteria of certain stock options to our Chief Executive Officer having been met in the first half of 2021, offset in part by an increase of legal and professional fees of approximately $250,000, a substantial portion of which related to costs associated with fund raising activities which have not yet come to fruition and have not been capitalized, and an increase in recruiting fees and related salary of a combined $178,000 related to our new CEO.

Other Income

Interest income in the six months ended June 30, 2022 and 2021 was insignificant. Other income for the six months ended June 30, 2021 represents the forgiveness of our PPP loan.

Net Loss

Net loss for the six months ended June 30, 2022 and 2021 was approximately $(2,462,000) and $(2,210,000), respectively, which represented a decrease of $(251,000), or 11%. The decrease was primarily attributable to the decrease in loss from operation of approximately $190,000 and the decrease in other income of $212,000, principally driven by the forgiveness of PPP loan in 2021.

Three months ended June 30, 2022 Compared with three months ended June 30, 2021

Overview

The following table presents certain information from the condensed consolidated statements of operations:

	For The Three Months Ended June 30, 2022	For The Three Months Ended June 30, 2021	Change	Change %
Revenues	$ 20,581	$ 287,153	$ (266,572)	-93%
Cost of Revenues	23,097	361,417	(338,320)	-94%
Gross (Loss) Profit	(2,516)	(74,264)	71,748	-101%
Operating Expenses:				
Research and development	647,705	466,042	181,663	39%
Selling, general, and administrative	677,847	772,352	(94,505)	-12%
Total Operating Expenses	1,325,552	1,238,394	87,158	7%
(Loss) Income From Operations	(1,328,068)	(1,312,658)	(15,410)	1%
Other Income:				
interest and other income	11	3,026	(3,015)	-100%
Interest expense	(3,668)	(5,451)	1,783	-33%
Net (Loss) Income	$ (1,331,725)	$ (1,315,083)	$ (16,642)	1%

Revenues

Revenues for the three months ended June 30, 2022 and 2021 were approximately $21,000 and $287,000, respectively, which represented a decrease of $267,000, or 93%. We had two clients as of June 30, 2022. The timing of revenue recognition is driven by the completion of specified deliverables and the billing of time and materials over periods of time. Accordingly, the recognition of revenue for these contracts will vary from time to time.

Cost of Revenues

Cost of revenues for the three months ended June 30, 2022 and 2021 were approximately $23,000 and $361,000, respectively, which represented a decrease of $338,000, or 94%. The decrease was attributable to increased labor costs associated with our internal research and development projects in 2021, as major client projects finished. We are currently focusing our resources on building our internal technology and have a couple of small customer pilot projects related to such technology. We have operated at a gross loss for the past year as our revenues are not yet significant to cover our fixed costs of the facility. We also incurred additional unrecoverable costs in the three months ended June 30, 2021 as we completed our government contract.

Research and Development

Research and development expenses for the three months ended June 30, 2022 and 2021 were approximately $648,000 and $466,000, respectively, which represented an increase of $182,000, or 39%. The increase was primarily attributable to an overall increase in our focus on internal research and development activities, which resulted in increased wage allocation as well as increased rent, facility fees, equipment usage costs and general lab supplies.

General and Administrative

Selling, general, and administrative expenses for the three months ended June 30, 2022 and 2021 were approximately $678,000 and $772,000, respectively, which represented a decrease of $94,000, or 12%. During 2022, a higher percentage of costs related to payroll and facilities costs were allocated from general and administrative costs to research and development, reflecting the increased focus on the internal R&D programs. This was partially offset by an increase of $81,000 in stock-based compensation in the three months ended June 30, 2022 due to recognition of expense related to awards issued to the former Chief Executive Officer and board members as compared to the corresponding 2021 period. In addition, there was an increase of legal and professional fees of approximately $250,000 in the three months ended June 30, 2022, a substantial portion of which related to costs associated with fund raising activities which have not yet come to fruition and have not been capitalized, and an increase in recruiting fees and related salary of a combined $178,000 related to our new CEO.

Other Income

Other income (expense) for the three months ended June 30, 2022 and 2021 was insignificant.

Net (Loss) Income

Net (loss) income for the three months ended June 30, 2022 and 2021 was approximately $(1,332,000) and $(1,315,000), respectively, which represented a decrease of $(17,000), or 1%. The decrease in the loss was primarily attributable to the decrease in non-cash compensation charge of approximately $697,000 in the 2022 period.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity

We measure our liquidity in a number of ways, including the following:

		June 30, 2022
Cash	$	604,255
Working Capital	$	221,019

As of June 30, 2022, we had cash and working capital of $604,255 and $221,019, respectively. We received proceeds of a private placement of our securities in early August 2022 and PPP loans in 2021. We expect our current cash on hand to be insufficient to meet our operating and capital requirements for the next twelve months from the date of this filing. This raises substantial doubt about our ability to continue as a going concern. The Company has engaged with an investment bank to assist with the fund raise; however, there can no assurance that a financing can be completed on terms acceptable to the Company. The Company has also taken preliminary steps to file a registration statement on Form S-1 with the SEC for a proposed public offering, but there is no assurance that the offering will be successful. Our operating needs include the planned costs to operate our business, including amounts required to fund working capital and capital expenditures as well as research and development. Our future capital requirements and the adequacy of our available funds will depend on many factors, including our ability to successfully commercialize our products and services, competing technological and market developments, and the need to enter into collaborations with other companies or acquire other companies or technologies to enhance or complement our product and service offerings. If we are unable to secure additional capital, we may be required to curtail our research and development initiatives and take additional measures to reduce costs in order to conserve our cash.

Our sources and uses of cash were as follows:

Net cash (used in) provided by operating activities for the six months ended June 30, 2022 and 2021 was approximately $(1,652,000) and $(1,098,000), respectively. Net cash used in operating activities for the six months ended June 30, 2022 includes cash used to fund a net loss of approximately $2,462,000, reduced by approximately $601,000 of non-cash income/expenses, partially offset by $209,000 of net cash provided by changes in the levels of operating assets and liabilities. Net cash provided by operating activities for the six months ended June 30, 2021 included cash used to fund a net loss of approximately $2,210,000, reduced by $1,087,000 of non-cash expenses, partially offset by $25,000 of net cash used in changes in the levels of operating assets and liabilities.

The relative increase in the use of cash in operations over the comparable 2021 six month period was fueled by 1) an increase in legal fees of $ 250,000 primarily to prepare for a potential public stock offering and up-listing 2) a lack of foundry service profit of 171,000, 3) an increase in fees used on consultants for Government and investor relations of $140,000, 4) recruiting fees for the new CEO of $ 100,000, and 5) an increase in salaries partially attributable to the new CEO for 3 months of approximately $78,000.

Net cash used in investing activities for the six months ended June 30, 2022 and 2021 was approximately $306,000 and $21,000, respectively, primarily attributable to the purchase property and equipment, and leasehold improvements in the laboratory.

Net cash provided by (used in) financing activities for the six months ended June 30, 2022 and 2021 was approximately $(37,000) and $4,849,000 respectively. Net provided by financing activities for the six months ended June 30, 2021 was primarily attributable to expenditures to the private placement of our common stock which yielded approximately $4.6 million in net proceeds, and the proceeds from the PPP2 loan and proceeds from the exercise of stock options. We make payments under our governmental loans of approximately $7,300 each month.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any off-balance sheet arrangements (as that term is defined in Item 303 of Regulation S-K) that are reasonably likely to have a current or future material effect on our financial condition, revenue or expenses, results of operations, liquidity, capital expenditures or capital resources.

CRITICAL ACCOUNTING POLICIES

Our critical accounting policies are included in Note 2 of our financial statements included elsewhere in this report.

RECENTLY ISSUED ACCOUNTING STANDARDS

Our recently issued accounting standards are included in Note 2 of our financial statements included elsewhere in this report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company and are not required to provide the information under this item pursuant to Regulation S-K.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) that are designed to be effective in providing reasonable assurance that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management to allow timely decisions regarding required disclosure.

In designing and evaluating disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute assurance of achieving the desired objectives. Also, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. The design of any system of controls is based, in part, upon certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of management, of the effectiveness of the design and operation of our disclosure controls and procedures. Based upon that evaluation, management concluded that our disclosure controls and procedures were not effective as of June 30, 2022 to cause the information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods prescribed by SEC, and that such information is accumulated and communicated to management, including our chief executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Controls over Financial Reporting

As of the end of the period covered by this report, there have been no changes in the internal controls over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting subsequent to the date of management’s last evaluation despite the fact that virtually all of our employees are working remotely due to the COVID-19 pandemic. We are continually monitoring and assessing the COVID-19 situation on our internal controls over financial reporting to minimize any related impact on their effectiveness.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

As a smaller reporting company, we are not required to provide the information required by this item.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The following exhibits are included and filed with this report.

Exhibit	Exhibit Description
3.1	Certificate of Incorporation of Odyssey Semiconductor Technologies, Inc. (Incorporated by reference to Exhibit 3.1 to Registration Statement on Form S-1 filed on November 15, 2019, File No. 333- 234741)
3.2	Bylaws of Odyssey Semiconductor Technologies, Inc. (Incorporated by reference to Exhibit 3.2 to Registration Statement on Form S-1 filed on November 15, 2019, File No. 333- 234741)
31.1	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer and Principal Financial and Accounting Officer
32.1	Section 1350 Certification of Principal Executive Officer and Principal Financial and Accounting Officer *
101	Interactive Data Files
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Definition

* Furnished and not filed.

SIGNATURES

Pursuant to the requirements of the Securities and Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized on August 15, 2022.

Odyssey Semiconductor Technologies, Inc.

By: /s/ Mark Davidson
Mark Davidson
Chief Executive Officer

EXHIBIT 31.1

Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934,
As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Mark Davidson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2022 of Odyssey Semiconductor Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods present in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13-a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involved management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 15, 2022

/s/ Mark Davidson
Mark Davidson
Chief Executive Officer
(Principal Executive Officer and Principal
Financial and Accounting Officer)

EXHIBIT 32.1

Certifications Pursuant to 18 U.S.C §1350,
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Solely for the purposes of complying with 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned, Chief Executive Officer (Principal Executive Officer and Principal Financial and Accounting Officer) of Odyssey Semiconductor Technologies, Inc. (the "Company"), hereby certifies, based on my knowledge, that:

1. This Quarterly Report on Form 10-Q of the Company for the fiscal quarter ended June 30, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 15, 2022

/s/ Mark Davidson
Mark Davidson
Chief Executive Officer
(Principal Executive Officer and Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.