



# WIDE MOAT

partners

**June 18, 2021**

**Best Idea: LWLG**

**Wide Moat Partners recommends the common stock of Lightwave Logic, Inc. (OTCQX: LWLG).** Wide Moat Partners are focused, long-term investors in businesses with entrepreneurial management and sustainable competitive advantages. We believe the common stock of LWLG is materially undervalued and should be worth ~10x from current levels and potentially ~100x in its long-run valuation.

Briefly, with total freedom of manufacturing, LWLG's patented polymers will drive the future of computing. Their technology is designed to transmit data at dramatically higher speeds with far less power consumption.

The following video from May 27, 2021, is a primer on the business. Feel free to skip through the COVID update, which fortunately did not have much to note. [Annual Shareholders Update Video](#)

The opportunity exists today because there is extreme demand for increased network capacity at lower power. LWLG will reduce network energy costs and enable faster data transmission. Further, they have never had meaningful revenue, and to date LWLG has not signed any partnership deals, therefore their future is not written in stone. This is why we believe the valuation of LWLG is only ~\$700M. However, it does not take much imagination to read between the lines of management's writings and video updates and deduce that LWLG is on the precipice of mass commercialization and extraordinary value creation for long-term shareholders.

On page 5 of [this linked investor presentation](#), LWLG management uses widely held market expectations to show the Tangible Addressable Market is growing very quickly and by 2025 should be approximately \$44B. In February of 2020 at the Noble Securities Conference, Jim Marcelli declared that LWLG could have one third of this market. Since Marcelli's prognostication, LWLG has not publicly said what percentage of the market it believes it could capture because we believe the projections are large enough that people would think they are being dishonest.

Management and the board of directors of LWLG are another reason we are invested as we believe they are of superb quality. CEO, Michael Lebbly co-founded Intel's photonics division in 2000, invested at Intel Capital (Intel's internal VC company), cut his teeth on the first iterations of photonics at Bell Labs, and leads photonics industry associations which set roadmaps for the future of the industry. The impressive board of directors includes the well-regarded former CTOs of Corning and JDS Uniphase (now Lumentum), Dr. Joseph Miller and Dr. Frederick Leonberger, respectively. These people are engineering PhD's and are known throughout their careers to be straight shooters and successful businessmen. Further, management and the board are paid in shares/options of LWLG stock, which signals their strong belief and support of the company and aligns their interests with ours.

We believe capturing one third of the market is a bit overzealous, so for the rest of this writing let us hyper-conservatively use 3%, which would be \$1.3B of revenue. This is only one of their potential revenue lines, therefore actual numbers are likely higher.



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LWLG has made it clear they will not use a tremendous amount of capex to build their own foundries and instead will most likely partner with multiple large foundries using either licensing deals or technology transfers to remain capital light. Basically, LWLG will use Apple's model of partnering with others (for Apple, partners like Foxconn and TSMC) to spin its material onto devices.

There is a myriad of short- and long-term catalysts and Lebbly telegraphs their moves in the videos and presentations above. Nearest term is an uplist to Nasdaq which will bring other institutional buyers and more stable price discovery. We believe the actual float of shares available for sale is much lower than ~105M as at least 60-65% of shareholders we know to be similarly long-term minded and are not selling their shares until the story plays out.

The main catalysts: As evaluation is underway with Tier-1 partners under NDA today, we believe LWLG will at some point in the near future (~6-18 months) sign multiple partnerships with foundries and end users to integrate LWLG material using current semiconductor architecture. This will be in the form of a co-authored press release. Once the first partnership is struck, we believe the other major semiconductor companies will have to find an alternative way to increase speed and lower power consumption; otherwise, competitively will be forced to partner with LWLG. This in our opinion could lead to large-scale adoption of the LWLG material perpetuating the value creation flywheel for shareholders.

The key risk to the business is another technology leapfrogging them and LWLG's patents being sold as an expensive science experiment. Yet, as Lebbly points out 15 minutes into the video linked above, the competition today cannot compete in the combination of speed, size, power, and stability – the four pillars of semiconductor success. For that reason, we believe we are buying a business in an industry with extraordinary barriers to entry at a price near its liquidation value.

Due to their capital light business model, we believe LWLG will keep expenses relatively low and profit margins quite high for a long period of time. The unique nature of their material and dynamics of the semiconductor market will create what Warren Buffett (we recognize this is out of his strike zone, but it is not out of ours) likes to call a wide moat around their business for the foreseeable future, allowing the company to earn very high rates of return on its invested capital.

The math of this business is incredibly simple due to a pristine balance sheet and capital structure. They have no debt and one class of common stock.

Assuming a 40% profit margin (which we believe to be conservative), earnings on \$1.3B of revenue would be \$500M in 2025. Employing a conservative earnings multiple, we can think about the valuation of this business – using a 20 P/E on that level of earnings yields a \$10B market valuation. Since there are approximately 105M shares outstanding, this leads to a price of about **\$95**, more than 10x where the business trades today. All of these numbers are very rough estimates, nonetheless, if LWLG captures any of the market, our patience will be rewarded.

We look forward to a world Powered by Lightwave Logic.

/s/ WIDE MOAT



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