

GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains explanations of certain technical terms used in this document in connection with our Company and our business. Such terminology and meanings may not correspond to standard industry meanings or usages of those terms.

“5G”	a mobile communications standard intended to replace 4G, allowing wireless internet access at a much higher speed
“6G”	the next evolution of cellular technology after 5G, promising significantly faster speeds, lower latency (down to microseconds), higher capacity, and enhanced intelligence by integrating technologies like AI, sensing, and quantum computing
“AI”	artificial intelligence
“anode current collector(s)”	a highly conductive metal foil that serves as a structural support and electrical pathway for the anode’s active material, connecting it to the battery’s external circuit to facilitate electron flow during charging and discharging
“automotive electronics”	electronic systems used in vehicles, including engine management, ignition, radio, carputers, telematics, in-car entertainment systems, and others
“battery energy density”	the amount of energy a battery stores relative to its weight or size, indicating how much energy fits into a compact, light package
“CAGR”	compound annual growth rate
“cathode copper”	a high-purity refined copper
“cathode roller(s)”	a crucial component, typically a large, precision-engineered cylinder (often titanium-copper-steel composite) used in producing lithium-ion battery electrodes and electrolytic copper foil, acting as the cathode surface where metal ions plate to form a uniform foil layer
“CCL”	copper clad laminate. A fundamental printed circuit board substrate in printed circuit board manufacturing, is the most widely used and is used to fabricate the boards
“electronic circuit copper foil”	a thin, flexible sheet of pure copper used as the conductive layer in PCB and other electronic components, forming the pathways that carry electrical signals, connect components, and dissipate heat, owing to copper’s excellent conductivity and malleability

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“electrolytic copper foil”	a metal foil material produced by electrolyzing a copper sulfate solution to deposit copper ions on the cathode
“energy storage system(s)”	the capture of energy produced at one time for use at a later time to reduce imbalances between energy demand and energy production
“ERP”	enterprise resource planning
“eVTOL”	electric vertical take-off and landing aircraft
“FR-4(Tg-140)”	a standard grade of flame-retardant epoxy glass fabric laminate (FR-4) with a glass transition temperature (Tg) of approximately 140°C
“GFA”	gross floor area
“GWh”	gigawatt-hour. A large unit of electrical energy, representing one billion watt-hours or one million kilowatt-hours
“HDI”	high-density interconnection. The cutting-edge technology for the production of PCB
“HF”	halogen free
“high-performance computing”	a technology that uses clusters of powerful processors that work in parallel to process massive, multidimensional data sets and solve complex problems at extremely high speeds
“high-speed communication”	rapid data transmission using technologies like fiber optics, 5G, 6G and advanced wireless/wired protocols, enabling real-time multimedia and remote operations by overcoming latency and bandwidth limitations for demanding applications like telesurgery and digital twins
“Hi-Tg”	high glass transition temperature
“HTE”	high-temperature elongation
“HVLP”	hyper-very-low-profile foil. A highly specialized, exceptionally smooth copper foil, often just a few micrometers thick, designed for high-frequency high speed electronics (like 5G/6G/AI) to minimize signal loss, featuring surface roughness typically below 2.5 μm by controlling crystal structure, crucial for high-speed data transmission where traditional rough foils increase resistance due to the skin effect

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“IPD”	Integrated Product Development, a structured product development and quality control system that integrates cross-functional teams, standardized stage-gate processes and lifecycle management to improve efficiency, reduce risks and ensure product quality from concept to commercialization
“lithium-ion battery”	an efficient and rechargeable energy storage device, serve as a core foundation supporting the energy transition in electric transportation, new power systems, and other fields
“lithium-ion battery copper foil”	a critical functional component of the lithium-ion battery that serves as the anode current collector
“low warpage”	the condition where a material or component exhibits minimal deformation or deviation from its intended geometry or flatness during or after the manufacturing process, reflecting effective control of internal stresses and thermal effects
“MPa”	megapascal. A unit of pressure or stress in the International System of Units
“mm”	millimeters
“MOM”	manufacturing operations management
“new energy materials”	advanced substances engineered for efficient energy capture, conversion, storage, and usage in renewable energy technologies, replacing fossil fuels
“PCB”	printed circuit board. A core material in the electronics industry, supports the development of electronic products toward higher performance, miniaturization, and intelligence
“peel strength”	the force per unit width needed to separate two bonded materials at a specific angle and speed, measuring the adhesive’s bond strength
“porous copper foil”	a high-surface-area copper material with a 3-dimension porous structure
“Ra”	arithmetic average roughness, indicating the overall average roughness of a surface.
“RTF”	reverse treated electrolytic copper foil. A copper foil that has been roughened to varying degrees on both sides
“Rz”	ten-point mean roughness, indicating the extreme peak-to-valley height on a surface and is more sensitive to occasional scratches, pits, or defects.

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“R&D”	research and development
“Six Sigma”	a data-driven business methodology aimed at reducing process variation and eliminating defects. It strives for near-perfect quality by ensuring that processes produce no more than 3.4 defects per million opportunities. The framework relies on statistical tools and a structured problem-solving hierarchy to improve efficiency and customer satisfaction.
“solid-state batteries”	an electrical battery that uses a solid electrolyte to conduct ions between the electrodes, instead of the liquid or gel polymer electrolytes found in conventional batteries
“sq.m.”	square meter
“tensile strength”	the maximum stress a material can endure while being stretched or pulled before it breaks or permanently deforms
“μm” or “micron”	micrometer