

UNLOCK YOUR SUCCESS WITH

# MCL'S VALUE ENGINEERING

## MCL VALUE ADD ENGINEERING SERVICES

### STRATEGIC COST CONSULTING

Uncover cost-saving opportunities without compromising quality. MCL's experts collaborate with you on material choices, layer adjustments, drill sizes, and panel optimization. Keep your project's expenses in check while maintaining top-notch function and reliability.

Say goodbye to wasted time, money, and unnecessary risks. Our Value Engineering Services ensures leading edge, engineering excellence for your PCB designs, securing the most cost-effective and top-tier quality boards.

### SURFACE FINISH CONSULTING

Choose the Right Surface Finish. Ensure RoHS compliance, seamless wire bonding, and flawless high-speed performance with expertly selected surface finishes. MCL's proven experience guarantees the ideal finish for your unique requirements.

### LAMINATE AND RAW MATERIAL CONSIDERATIONS

Elevate your PCB's performance with the right laminate. From high-speed RF/microwave needs to rugged environments, MCL helps you choose materials like Rogers, polyamide, or ceramic for precision. Ensure RoHS compliance with higher Tg materials above 140 Celsius. MCL's team will assist in refining your laminate and material choices.

### STACKUP DESIGN

Craft cost-efficient, impedance-aligned PCB stackups that resist bow and twist. MCL guides your stackup selection for the perfect fit, even providing impedance models for easy integration into your design tools.

### PANELIZATION DESIGN

MCL streamlines panel optimization, creating efficient assembly-ready panels with rails, fiducials, and tooling holes. From simple to intricate layouts, our solutions ensure high-volume production with customization flexibility.

### DXF TO GERBER CONVERSION

Embrace Gerber's efficiency for faster production. MCL's swift DXF to Gerber conversions enhance your design process, minimizing errors, and accelerating time-to-market.

### CONTROLLED IMPEDANCE MODELING

Achieve flawless signal integrity with MCL's controlled impedance expertise. From stackup guidance to modeling, we prioritize signal reflections, ensuring top-tier performance for your specialized PCB needs.

## LEVERAGE OUR TEAM OF PCB TECHNICAL EXPERTS TO:

- Accelerate time-to-market.
- Successful rapid prototyping and design for manufacturability.
- Shield against disruptions in your supply chain.

DON'T LET DELAYS AND UNCERTAINTIES HOLD YOU BACK - CHOOSE MCL AND STEP INTO A FUTURE OF STREAMLINED SUCCESS.