# Power Design – Head to Head

## Discrete vs. OmniOn Voltage Regulator/Point of Load (POL)

In the match-up between two leading power design options, one clear winner emerges.

| | DISCRETE | vs. | VOLTAGE REGULATOR MODULE |
|---|---|---|---|
| Reliability | **Greater Risk** | | **Less Risk** IPC9592 Adherence |
| Mean Time Between Failures (MTFB) | **Designer Managed** | | **Set & Managed** by Vendor |
| Performance | **Repeat Testing** Needed to Verify | | **Design Quality Proven, Qualified & 100% Tested** in Manufacturing Facility |
| Design & Schedule Risk | Design Variables Can Lead to **Board Spins & Delays** | | Power Design **Completed & Verified by Manufacturer, Reducing Delay Risks** |
| Support & Troubleshooting | **Multiple Suppliers & Vendors** to Contact & Keep Track of | | **Single Point of Contact** |
| Board Real Estate | Uses **100% of Available Space** | | Uses Up to **50% Less Space** |
| Bill of Materials (BOM) | **10-50** Components | | **3-7** Components |
| Material Management | **High Number** of SKUs | | **Up to 90%** Fewer SKUs |
| In Event Failure | **Scrap** the Entire Board | | **Replace** the Voltage Regulator/POL |
| Design Approach | **Limited to Component Library** | | Leverages **Best Components Available** for the Design |

Want to learn more about Voltage Regulators/POL products? Check out our website.