

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

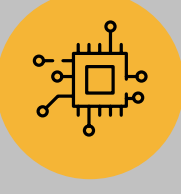
Up to 90%
Fewer SKUs



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