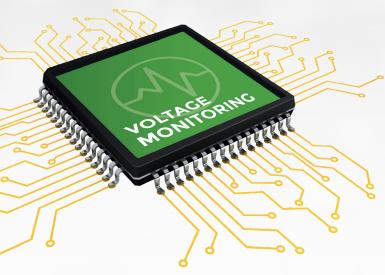


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Moortec Embedded Voltage Supply Monitor IP

Moortec Semiconductor provides embedded voltage supply domain monitor IP for your System on Chip (SoC) at 28nm and FinFET.



Deliverables:

- · GDSII
- · LEF (Abstract) view
- Liberty timing files
- \cdot LVS netlist
- Verilog model

Interfacing options:

- \cdot AMBA APB interface available
- IEEE IP1500 interface available

Features:

- · Accurately measures core supply domain voltages
- High accuracy
- Measurement of supply ranges up to 1.5V
- \cdot Digital interface for simplified chip integration
- Multiple supply domain monitoring with single IP instance 16 channels
- Uses standard digital process requiring no extra process layers
- \cdot Low power operation
- Small size

Applications:

Monitor multiple core supply domains to:

- \cdot Raise low voltage supply alarms for logic circuits
- Enable Dynamic Voltage Scaling (DVS) Schemes
- \cdot Measure on-chip IR drops
- · Provide real-time supply data
- Enable hacking detection and protection
- Monitoring of up to 16 supply domains per IP instance

Digital interface provides:

- Simplified integration with no shielded analogue signals to route
- · Easily addressable sensor instances
- Multiple monitor instances
 supported on a single chip

Silicon characterisation and qualification:

- Stress based JEDEC HTOL testing
- Accurately measures device supplies during characterisation

Available on:

- TSMC
- \cdot Global Foundries
- SMIC
- UMC