

INTERSIL POWER MODULE FOR XILINX® VIRTEX-6 HXT CHARACTERIZATION BOARDS



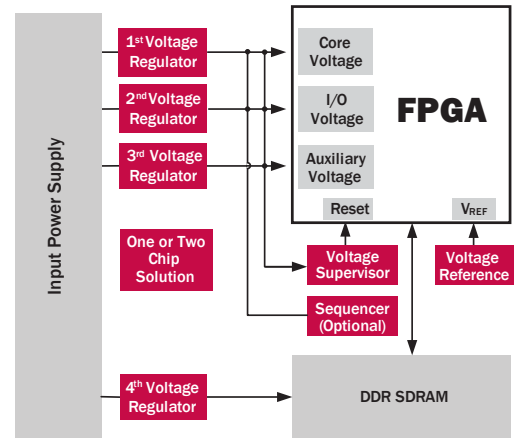
Overview

INTERSIL POWER SOLUTIONS FOR XILINX FPGAs

Intersil Corporation offers a complete portfolio of high performance power solutions for Xilinx FPGAs and other loads in your system. These products, which range from standard linear regulators to highly flexible PWM controller & driver options to plug-in fully integrated power modules, are tailored to meet every designer's challenges.

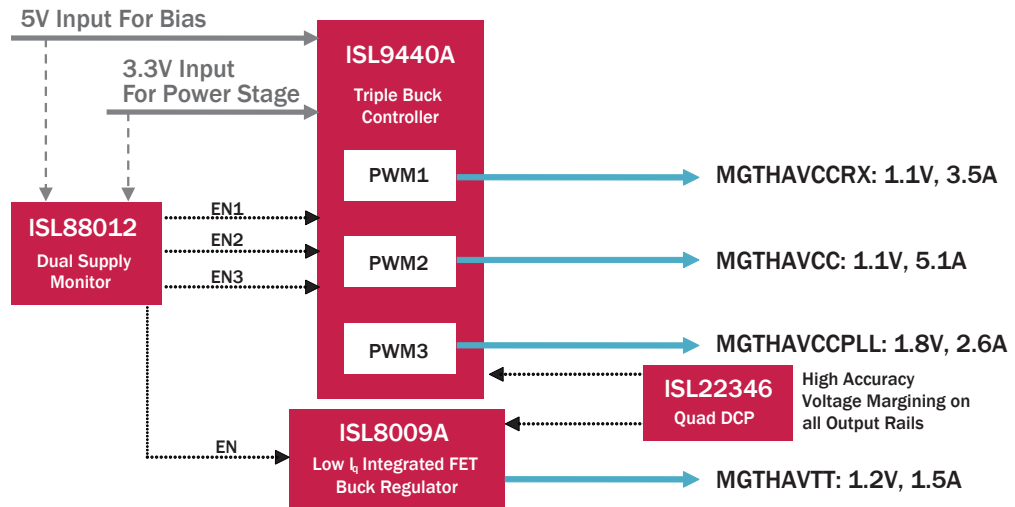
Intersil also makes designing with power products EASY by providing cutting edge support tools like iSim (an online simulation tool), thorough application notes, a broad selection of evaluation boards, comprehensive technical documentation, and the industry's BEST Field Application Engineers to support you every step of the way.

Intersil is the one-stop shop for all of your power requirements!



Power Module Block Diagram

POWER MODULE FOR HIGH-SPEED GTH SERIAL TRANSCEIVERS ON VIRTEX-6 HXT CHARACTERIZATION BOARDS



ISL9440A: TRIPLE, 180° OUT-OF-PHASE, STEP-DOWN PWM AND SINGLE LINEAR CONTROLLER

- Three Independent Integrated Synchronous Buck PWM Controllers
- Internal Bootstrap Diodes
- Internal Compensation & Soft-Start
- Adaptive Shoot Through Protection
- Out-of-Phase Switching to Reduce Input Capacitance (0°/180°/0°)
- No External Current Sense Resistor - Uses Lower MOSFET's $r_{DS(ON)}$
- Current Mode Controller with Voltage Feed Forward
- Overcurrent, Overvoltage, Undervoltage, Over-Temperature Protection
- Wide Input Voltage Range

ISL8009A/B: 1.5A LOW QUIESCENT CURRENT 1.6MHZ HIGH EFFICIENCY SYNCHRONOUS BUCK REGULATOR

- Synchronous Buck Regulator with up to 95% Efficiency
- 2.7V to 5.5V Supply Voltage
- 3% Output Accuracy Over-Temperature/Load/Line
- 1.5A Guaranteed Output Current
- Selectable Forced PWM Mode and PFM Mode
- Less Than 1µA Logic Controlled Shutdown Current
- Internal Soft-Start and Current Mode Compensation
- Internal Digital Soft-Start
- Peak Current Limiting, Short Circuit and Over-Temperature Protection

INTERSIL POWER MODULE FOR XILINX® VIRTEX-6 HXT CHARACTERIZATION BOARDS



ISL88012: 5 LD VOLTAGE SUPERVISORS WITH DUAL VOLTAGE MONITORING

- Fixed-Voltage Options Allow Precise Monitoring of +2.5V, +3.0V, +3.3V, and +5.0V Power Supplies
- Dual Supervisor Has One Fixed Voltage Input and Another That is User-Adjustable Down to 0.6V.
- Both RST and RST# Outputs Available
- Manual Reset Input on All Devices
- Reset Signal Valid Down to VDD = 1V
- Accurate ±1.5% Voltage Threshold
- Immune to Power-Supply Transients
- Ultra Low 5.5µA Supply Current
- Small 5 Ld SOT-23 Pb-Free Package

ISL22346: QUAD DIGITALLY CONTROLLED POTENTIOMETERS (XDCTM); LOW NOISE, LOW POWER I²C BUS, 128 TAPS

- Four potentiometers in one package
- 128 resistor taps
- I²C serial interface
- Three address pins, up to eight devices/bus
- Non-volatile storage of wiper position
- Shutdown current 5µA max
- Power supply: 2.7V to 5.5V
- 50kΩ or 10kΩ total resistance
- High reliability & endurance: 1,000,000 data changes/bit/register
- Register data retention: 50 years @ T ≤ +55°C

Triple Controller
ISL9440A
Regulator
ISL8009A



Monitor
ISL88012



DCP
ISL22346

INTERSIL INTERACTIVE WEB DESIGN SIMULATION TOOL

Easily Generate Schematics with Intersil's Devices



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