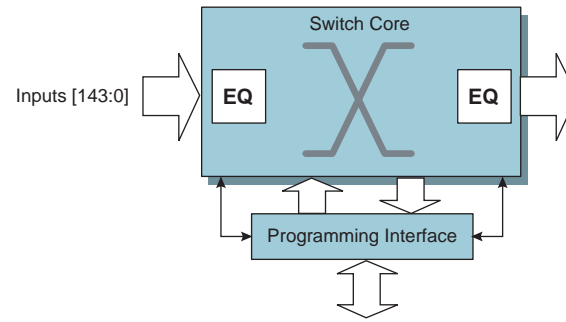




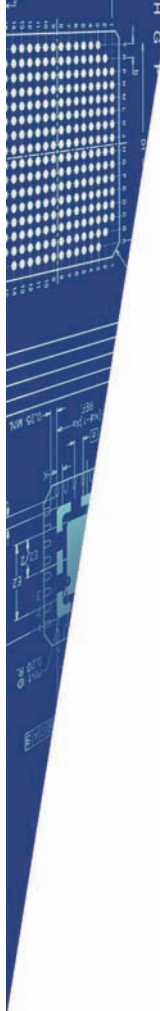
BLOCK DIAGRAM:



FEATURES :	BENEFITS :
▶ 6.5 Gbps 144 × 144 strictly nonblocking switch matrix with multicast and output striping programming modes	▶ 936 Gbps aggregate bandwidth in a single chip for high-speed switching and video systems
▶ Input signal equalization (ISE) with programmable control globally or on a per-channel basis	▶ Addresses system-level and board-level signal integrity and intersymbol interface (ISI) jitter issues
▶ Adjustable output pre-emphasis EQ	▶ EQ and drive flexibility for driving boards, cables, and connectors
▶ Differential current mode logic (CML) data output driver	▶ Convenient I/O flexibility for interfacing with multiple protocols
▶ Protocol-independent switching and data transmission	▶ Can be used with latest storage, Ethernet, and network protocols
▶ 16 W typical power dissipation	▶ Low per-channel power
▶ 45 mm × 45 mm, 1.27 mm pin pitch, 1072-pin BGA package	▶ Layout-friendly package and pinout for easier PCB design
▶ Parallel and serial programming modes for configuration and monitoring	▶ Programming and control convenience
▶ Software control to optimize power dissipation	▶ Control and lower overall power when ports are not used

APPLICATIONS :

- ▶ Core and metro transport
- ▶ Enterprise
- ▶ High-speed automated test equipment
- ▶ Broadcast video systems
- ▶ Storage, Ethernet, and networking equipment



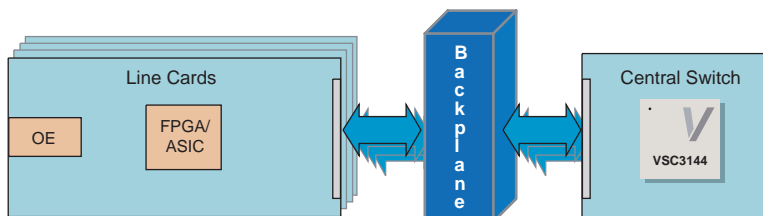
VSC3144

each I/O port. Each VSC3144 data output can be programmed to connect to any of its inputs. The signal path through the device uses no registers and is fully asynchronous. This means there are no restrictions on the phase, frequency, or signal pattern of any input.

A high degree of signal integrity is maintained throughout the VSC3144 device because each high-speed output is a fully differential, switched-current driver with on-die terminations. Data inputs are

Core programming for the VSC3144 device is issued port-by-port basis, or multiple program assignments issued simultaneously using the CONFIG bit. Channels can be initialized for straight-through, multicast, or other applications that require only a subset of the Power-down is enabled in the software by programming outputs with a power-down code.

BACKPLANE APPLICATION:



SPECIFICATIONS:

- ▶ 6.5 Gbps NRZ per-channel data rate
- ▶ 2.5 V power supply (2.5 V or 3.3 V program port power supply)
- ▶ 2.5 V or 3.3 V CMOS TTL-compatible I/O
- ▶ Differential CML I/O with integrated termination impedance
- ▶ 0 °C to 85 °C operating temperature range

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