

TORNADO-SX/T1E1Q

SIOX I/O Coprocessor Daughter-Card Module with Quad T1/E1/J1 Line Interface for TORNADO DSP Systems and Controllers

features

- daughter-card module fits to TORNADO SIOX rev.B site
- direct interfacing to PSTN/PBX via four T1/E1/J1 lines (120 voice channels for E1, 96 voice channels for T1)
- TDM link for communication with host TORNADO DSP
- two optional external TDM links to MVIP/SCSA/H100bus controllers or any TDM equipment
- extremely flexible architecture with programmable voice/signaling channels hardware routing and uploadable CAS/CCS signaling microcode
- on-board environment is open for user programming
- optional stand-alone operation with external +5v power

construction

- complete quad T1/E1/J1 line interface (Framer+LIU)
- 512x512 Digital Channel Router (DCR) for flexible voice/signaling channels routing
- high-performance TMS320C5410 or TMS320C5416 fixed-point DSP (100/160 MIPS, 16-bit, 64K/128Kx16 on-chip RAM) for voice/data pre-processing and datapath management
- DCR fans to T1/E1/J1 Framers, DSP McBSP ports and optional external TDM links
- on-module DSP communicates to host TORNADO onboard DSP via SIOX SIO-0 port and mutual interrupts
- 128Kx8 FLASH for DSP boot code
- DSP starts-up in either no-boot mode or boots from either FLASH or SIOX SIO-0 port
- power supervision and watch-dog timer for stand-alone operation

DSP software development tools

- JTAG port for TI XDS510 or MicroLAB Systems MIRAGE-510DX emulators
- TI C5000 Code Composer Studio Compile/Debug tools
- Virtuoso and Nucleus Real-Time OS tools

Applications

- CTI
- IP-telephony
- · answering machines and office phone-menus
- speech/fax/modem PSTN recorders
- speech/fax/modem PSTN transcoders and encryptors
- stand-alone and build-in PSTN routers
- network-to-PSTN gateways





