



ALACRON

FastI/O PMC Mezzanine Board

One of Alacron's most recent additions to its FastSeries family, based on Philips's TriMedia processor, is FastI/O, a PMC daughter-card that lets you add extra I/O ports to your FastImage PCI board or FastDSP PCI board.



Hardware, Software,
Applications, and
Systems for Machine
Vision and Imaging

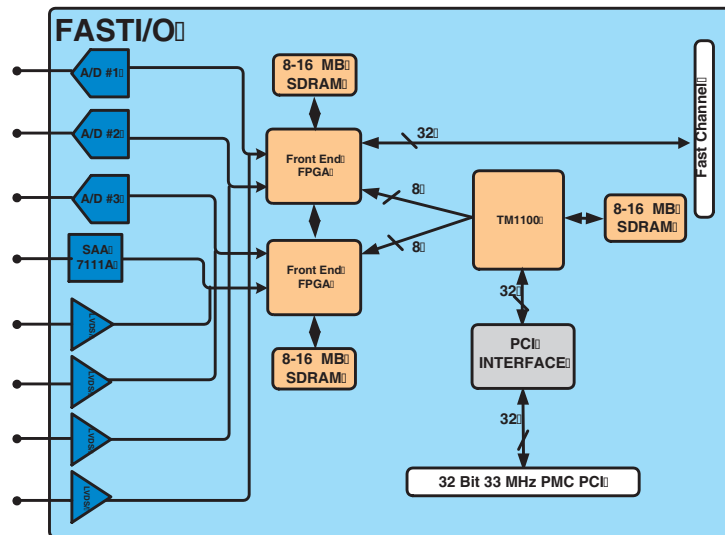
FASTI/O PMC Mezzanine Key Features:

- Available in both analog/digital and digital-only configurations for greatest flexibility and cost savings
- One TriMedia TM-1x00 processor
- 38-16 MB of SDRAM (up to 400 MB/sec.)
- Programmable FPGAs with 16 MB Frame Buffer
- Input options:
 - Digital, 32 data bits with control and clock, or
 - NTSC/PAL/SECAM, or
 - Three asynch RS-170 inputs or one RGB input
- 32-bit side-band to FastSeries crossbar in P4 connector
- PMC form factor
- Fast Channel:
 - 80 MHz 32 bit persistent channels in 4 bit increments for intra- and interboard communication
 - Point to point connections at up to 320 MB/s via cross bar interconnect
 - Data traffic does not affect host CPU or PCI bus





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SPECIFICATIONS

ANALOG VIDEO CAPTURE (3CHANNELS)

- Input levels - 1V peak to peak nom, 2.0V peak-to-peak max.: 50mV min. sync level when using composite sync
- Input impedance- 75 Ohms
- Resolution - 8 bits * 3 channels
- Formats supported - Line scan and area scan
- Input option - Each input can operate asynch

DIGITAL VIDEO CAPTURE

- Common mode input range - 0 to +5V (0 to 2.4V with LVDS option)
- Input sensitivity - 250 mV differential (100mV with LVDS option)
- Input Hysteresis - 50 mV typical
- Max. clock rate - 40 MHz
- Max. input data width - 32 bits
- Formats supported - ITU-R BT.656 (4:2:2 interlaced color) 8/10-bit mono variable/line scan, 8/10-bit raw data, 8/10-bit RGB, 6-bit raw at 20MHz (40 MB/sec.)
- RS-422, LVDS signaling

PMC INTERFACE

- Clock Rate - 33MHz max.
- Data Width - 32 bits
- Peak DMA rate - 132 MB/sec.
- Standards Compliance - PCI REV. 2.1

FAST CHANNEL

- 80 MHz 32 bit persistent channels in 4 bit increments for intra- and interboard communication
- Point to point connections at up to 320 MB/s via cross bar interconnect
- Data traffic does not affect host CPU or PCI bus

