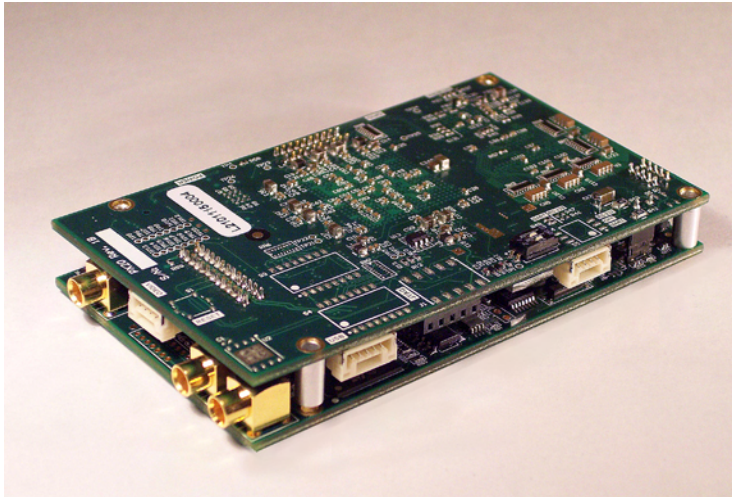


PX60 Series Image Processors

This information applies to the following model designations:
PX60PCB-B



The PX60PCB uses an FPGA in addition to dual-core processor technology to provide a powerful FPGA+DSP platform capable of executing a complete suite of real-time video image-processing functions simultaneously. Like the PX40PCB, the PX60PCB includes an ARM-9 general-purpose microprocessor running embedded Linux for robust user-interface and control implementations. The PX60PCB has the same footprint as the PX40PCB.

Like the PX40PCB, the PX60PCB runs applications firmware from Pixon Imaging's *Image Processing Suite* to provide an exceptionally powerful turn-key video image-processing system for military, homeland security, surveillance, scientific, and other high-end imaging applications.

Specifications

Video inputs	
Video In	75 ohm, composite (CVBS, RS-170), 1 V p-p, NTSC or PAL format
Video outputs	
Video Out	Composite (CVBS, RS-170), 1 V p-p into 75 ohm load, video format same as "Video In" signal
Video Loop-Through	Composite (CVBS, RS-170), 1 V p-p into 75 ohm load, buffered "Video In" signal
Video bypass feature	
Video-signal-processing bypass (solid-state switching), software-controlled or hardware external control (logic-level); default mode on power-down or watchdog failure is bypass	Buffered output; 0.5 ohm maximum series resistance; alternative power input to run bypass and pass-through if main power source fails
Alternate power input	
3.3 to 5.5 VDC, 40 mA maximum	Alternative power input to maintain bypass and loop-through amplifiers if main power source fails
Networking and control ports	
Serial port	Switch-selectable EIA-232 or +3.3 V UART
Ethernet	10/100BaseT Ethernet (separate transformer or intergrated transformer/RJ45 jack required)
USB	USB1.1 and USB2.0 compliant, adapter board required
GPIOs	
Logic-level I/O (each line programmable as input or output)	6 lines, 1.8 V logic levels, unbuffered (external ESD protection required)
Power requirements	
Supply voltage	5.0 VDC $\pm 10\%$
Load regulation	$\pm 5\%$, maximum ripple 50 mV p-p, transient response 2 ms for 50% load change
Line regulation	$\pm 5\%$
Supply current	650 mA typical (at 5.0 VDC)

Environmental	
Ambient temperature range, operating [1]	-10 to 70 °C standard; -40 to 85 °C extended
Ambient temperature range, storage	-60 to 125 °C
Humidity	3% – 90%, non-condensing
Altitude, convection cooling	TBD
Altitude, forced-air cooling	TBD
Dimensions	
H x W x D (no MCX extension)	50.0 x 76.0 x 13.0 mm
H x W x D (with MCX extension, 90-deg MCX connectors)	50.0 x 88.0 x 13.0 mm
Weight (no MCX extension)	60 g
Weight (with MCX extension, 90-deg MCX connectors)	66 g

Notes:

[1] Convection cooling, vertical orientation

NOTICE: The information in this document is preliminary. It describes proposed features and design targets and should not be relied upon for design purposes. Contact Pixon Imaging Sales or Technical Support for up-to-date information and specifications.