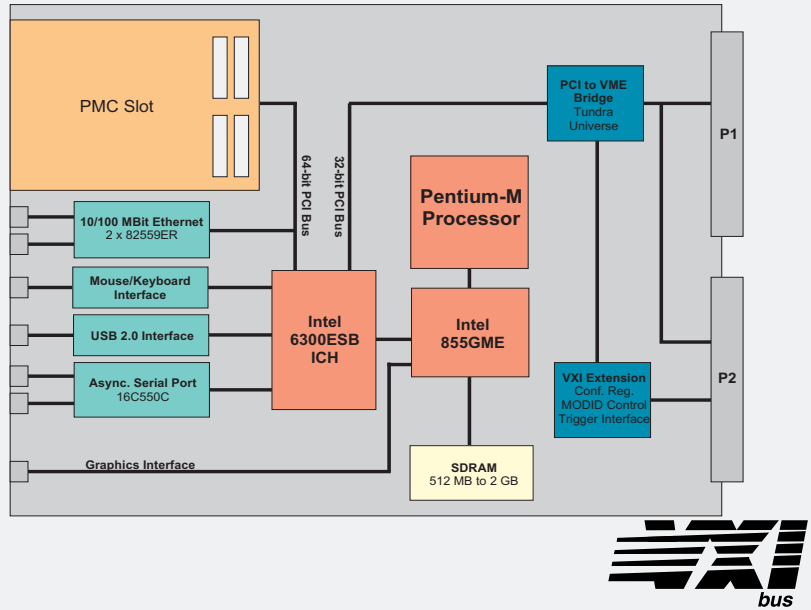


3047 EMBEDDED SLOT-0 CONTROLLER



- Single Slot C-Size VXIbus Slot-0 Controller
- 1.6 GHz Pentium-M Processor with 400 MHz Front Side Bus
- Up to 2 GByte 333 MHz DDR ECC SDRAM
- Two Gigabit Ethernet Interfaces
- Configurable Slot-0/non-Slot-0 Operation
- PMC Expansion Slots with Front-Panel I/O

POWER

General

The ProDAQ 3047 Intel Pentium-M processor based Slot-0 Controller provides a powerful, fully customizable platform for embedded applications with a processor speed of 1.6 GHz. The 32-bit processor supports the Dual Independent Bus (DIB) architecture with the backside bus connected to the "on-die" Level 2 cache and the 64-bit frontside bus connected to the memory controller at 400 MHz to provide a maximum theoretical transfer bandwidth of 3.2 GByte/s.

DRAM Memory

The ProDAQ 3047 supports up to 1 GByte of ECC protected DDR333 SD-RAM on-board plus up to 1 GByte ECC protected DDR333 SD-RAM in one SO-DIMM socket for a maximum memory capacity of up to 2 GByte.

PCI Busses

The ProDAQ 3047 features two on-board PCI busses provided by the 6300ESB I/O controller Hub. The primary bus is 64-bit wide and able to operate at 33 or 66 MHz. It connects the two Gigabit Ethernet interfaces and the PMC site with the Hub. The secondary bus connects the VXIbus interface to the hub, using 32-bit at 33 MHz.

Super VGA Controller

High-resolution graphics and multimedia-quality video are supported on the ProDAQ 3047 by a built-in 855GME graphics adapter, using up to 64 MBytes of UMA memory. Screen resolutions up to 2048x1536@75Hz and up to 16M colors are supported by the graphics adapter.

Ethernet Controller

The ProDAQ 3047 supports Ethernet LANs with two Intel 82546GB Ethernet controllers. 10 Base-T, 100 Base-TX and 1000 Base-T are supported via two RJ45 connectors.

I/O Ports

Two 16550-compatible serial ports, a combined PS/2 keyboard and mouse connector and a USB 2.0 host controller port are featured on the ProDAQ 3047's front panel.

PMC Expansion Slot

One PMC Expansion slot provide the capability of customization to satisfy the application needs. The PMC slot excepts PMC expansion cards operating at 3.3V or 5V signaling levels and can operate in either 32-bit or 64-bit mode at both 33MHz or 66 MHz.

ProDAQ

Hard Disk Drive

The ProDAQ 3047 features a high-density 2.5" hard disk drive. Different capabilities are available.

Trigger Interface

The ProDAQ 3047 supports both the VXIbus TTL and ECL trigger lines. Trigger signals can be generated under software control. On detection of a trigger signal a local interrupt can be generated.

Software

Board Support Packages as well as a VISA library and resource manager according to the VXIplug&play standard are available for a number of operating systems. Please contact Bustec Production Ltd. for an up-to-date list.

VXIbus Interface

The VXIbus Interface of the ProDAQ 3047 incorporates special byte-swap hardware to allow the big-endian data from other VXIbus modules to be converted into the little-endian format used by the Intel 80x86 processor family. Independent byte swapping for both the master and slave interface and high-throughput DMA swapped transfers are supported.

Configuration options enable the ProDAQ 3047 to be used as a VXIbus Processor Module in non-Slot-0 applications.

Ordering Information:

3047-xy Embedded Slot-0 Controller
1.6 GHz Pentium-M CPU




x: A No Hard Disk
B 40 GB Hard Drive
C 60 GB Hard Drive
D 80 GB Hard Drive

y: D 512 MB DRAM
E 1024 MB DRAM

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Bustec Production Ltd.
World Aviation Park
Shannon, Co. Clare
Rep. of Ireland
t +353 61 707 100
f +353 61 707 106
e sales@bustec.com
w www.bustec.com

Bustec, Inc.
35486 Lorain Road
North Ridgeville
OH 44039, U.S.A.
t +1 440 327 8930
f +1 440 327 8982
e sales@bustec.com
w www.bustec.com

Processor Type Cache Chipset	Intel Pentium-M at 1.6 GHz 1 MByte on-die level 2 cache Intel 6300ESB/855GME with 400 MHz System Bus																
Main Memory On-board Socket	Up to 1 GByte ECC protected PC333 SDRAM Up to 1 GByte ECC protected PC333 SO-DIMM																
I/O Ports KB/Mouse RS232 Ethernet USB	Combined Keyboard/Mouse on PS/2 connector Dual 16550 compatible on micro-DB-9 connectors Dual 10 Base-T/100 BASE-TX/1000 Base-T on RJ45 connectors USB2.0 host controller																
Graphics Interface Type Memory Resolution	High-performance 815GME graphics accelerator up to 64 MByte UMA memory Up to 2048x1536@75Hz, 16M colors																
Hard Disk Interface Drive	Ultra DMA/100 2.5" IDE Hard Drive																
IEEE P1386.1 PMC Slot Address/Data PCI Bus Clock Signaling Env. & 3.3V IO Routing	A32/D32/D64 33/66 MHz 5V Front-panel																
VXIbus Interface DTB Master DTB Slave Arbiter Interrupt Handler/Generator Trigger Interface Byte Swapping Slot-0/System Controller	A16/A24/A32; D08-D32, BLT; D64 MBLT A24/A32; D08-D32, BLT RR/PRI IRQ 1-7 TTL0-7, ECL0-1 Independent for master and slave interface Auto slot-0 detection or software selectable																
Current Consumption	<table border="1"> <thead> <tr> <th>Voltage (V)</th> <th>Current (mA)</th> </tr> </thead> <tbody> <tr> <td>+24</td> <td>TBD</td> </tr> <tr> <td>+12</td> <td>TBD</td> </tr> <tr> <td>+5</td> <td>TBD</td> </tr> <tr> <td>-5.2</td> <td>TBD</td> </tr> <tr> <td>-2</td> <td>TBD</td> </tr> <tr> <td>-12</td> <td>TBD</td> </tr> <tr> <td>-24</td> <td>TBD</td> </tr> </tbody> </table>	Voltage (V)	Current (mA)	+24	TBD	+12	TBD	+5	TBD	-5.2	TBD	-2	TBD	-12	TBD	-24	TBD
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-24	TBD																
Dimensions	VXIbus Single-Slot C-Size Module																
Weight	TBD																
Operating Temperature	0° C to 50° C																
Storage Temperature	-40° C to 70° C																
Shock and Vibration Functional Shock Random Vibration	30g peak, half-sine, 11 ms puls <small>(Test performed in accordance to IEC 60068-2-27 and MIL-T-28800E Class 3.)</small> 5 to 500 Hz, 0.3g _{RMS} operational 5 to 500 Hz, 2.4g _{RMS} non-operational <small>(In accordance with IEC 60068-2-64 and MIL-T-28800E / MIL-STD-810E Meth. 514.)</small>																
Software Support	 <p>Microsoft Windows 2000 Professional with VXIplug&play compatible VISA library and resource manager. Microsoft Windows XP Professional with VXIplug&play compatible VISA library and resource manager.</p>  <p>WindRiver VxWorks Board Support Package and VXIplug&play compatible VISA library and resource manager.</p>  <p>VXIplug&play compatible VISA library and resource manager for Linux.</p> <p>Contact Bustec Production Ltd. for more information.</p>																
Warranty Period	12 month standard; extended periods available at additional cost.																



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