

PCI 6152 Key Features

- ◆ PCI Bridging Up to 66MHz
- ◆ 300mW Power Consumption
- ◆ 15 x 15 mm Tiny BGA Package
- ◆ PQFP Package Option
- ◆ Pin Compatible with 21152

Other Important Features

- ◆ 3.3V signaling, including 5V input signal tolerance
- ◆ Supports delayed transactions for PCI configuration, I/O and memory read commands
- ◆ Hot swap friendly
- ◆ Zero wait state burst
- ◆ Provides memory write data buffering in both directions
- ◆ Provides concurrent primary and secondary bus operation to isolate traffic
- ◆ Provides separate arbitration support for individual secondary port
- ◆ Programmable 2-level arbiter
- ◆ Enhanced address decoding
- ◆ 32-bit I/O and memory address decoding
- ◆ Three-stating of I/O during power up and power down

Application:

Flat Panel TV

PLX Product:

PCI 6152 – 32-bit FastLane PCI Bridge

Key Benefit:

Provides Connectivity Flexibility on Option Add-In Card

Flat Panel TV Adds PCI Bus for I/O Interconnect Flexibility



The flat panel TV is the latest consumer product to use FastLane Bridges. The ubiquity of the PCI interface on existing I/O chips (1394/Firewire, VGA, USB, Ethernet, Tuners and others) make PCI the natural interconnect choice for flexibility in deploying these I/Os as options in a TV set. In this setting, the flat panel TV has a PCI bus on the system board inside the TV. A single PCI slot is included on this board. Various optional add-in cards are deployed into the slot as different I/O options are required. Many of these add-in cards have multiple I/O devices...this requires a FastLane Bridge for load expansion.

Low-Cost, Low Latency, Lead Free Load Expansion

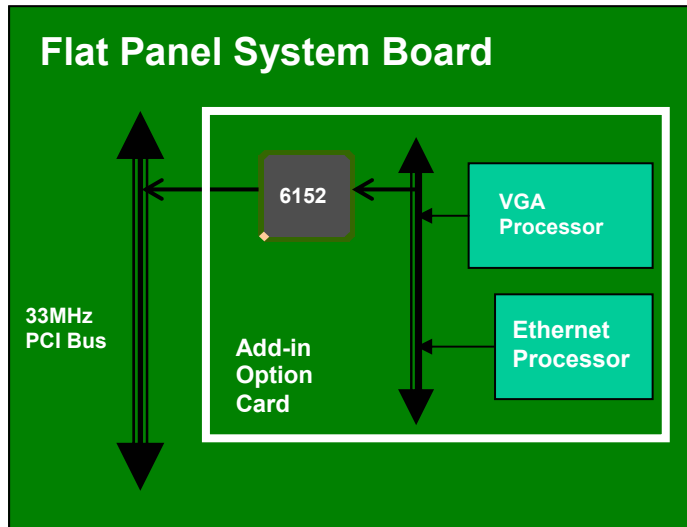
Choosing the right FastLane bridge can be a challenge, given the fact that PLX offers 10 different models, ranging from low-cost 32 bit devices through high performance feature-laden 64-bit PCI-X bridges, from 33MHz to 133MHz. The requirements for the flat-panel

TV that drive the bridge selection are: (1) cost-effectiveness (2) lead-free (3) small footprint and (4) industry-standard pin out. The best fit for these four categories is the PCI 6152-CC33BC from PLX.



Simple Option Add-In Card Design

The PCI 6152 enables simple option cards for the flat panel TV as shown below. In this example Ethernet connectivity and a VGA interface are combined on the option card.



The Smallest Footprint

The PCI 6152 is the smallest FastLane device, with a TinyBGA footprint of 15mm x 15mm. This makes the PCI 6152 ideal for low-profile PCI cards and other PCI cards that have board space limitations.



Lead Free Packaging NOW!

Both Tiny BGA and PQFP versions are available in lead-free ROHS-compliant versions as well as the traditional leaded packages.

PLX Advantages

- ◆ The industry's best PCI expertise and support
- ◆ Smallest Footprint Bridge (15mm x 15mm)
- ◆ Ultra Low Power (300mW)
- ◆ Low cost

Design Tools & Documentation:

On PLX Public ToolBox:

http://www.plxtech.com/products/fastlane_bridges/PCI6152/default.asp

- ◆ DataBook, IBIS Models, App Notes, Product Brief, Hspice Models

Part Number	Package	Speed
PCI 6152-CC33PC	Standard Leaded PQFP Package	33 MHz
PCI 6152-CC33PC G	Lead-Free ROHS Green PQFP Packaging	33 MHz
PCI 6152-CC66BC	Standard Leaded TBGA Package	66 MHz
PCI 6152-CC66BC F	Lead-Free ROHS TBGA Package	66 MHz
PCI 6152-CC66BC	Standard Leaded TBGA Package	66 MHz
PCI 6152-CC66BC F	Lead-Free ROHS TBGA Packaging	66 MHz

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