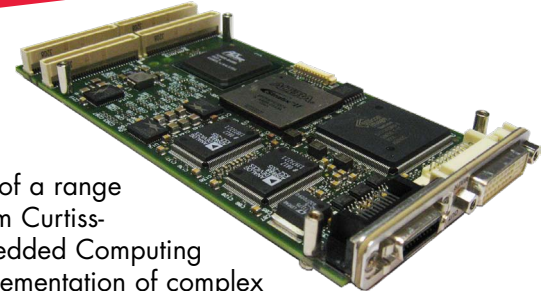


PMC-285

Video Mixer PMC with Scaling

- ◆ Mixing, blending, scaling and windowing of RGB and DVI inputs into a single DVI output
- ◆ Convert high-definition RGB analog input to DVI output
- ◆ Can be used as a 2x1 switch to select either RGB or DVI input
- ◆ Simple software interface to control the mixing/blending parameters and scale and position of video windows
- ◆ Available as a low-power PMC deployable in a wide range of applications and environments
- ◆ Part of a range of video routing and mixing products – for more, visit cwembedded.com



The PMC-285 is one of a range of video products from Curtiss-Wright Controls Embedded Computing that facilitate the implementation of complex video systems, meeting the needs of systems integrators that have requirements for switching and routing video and for more complex operations such as multi-video windowing.

The PMC-285 fulfills a conceptually simple capability that has often required a complex and relatively costly solution based on a graphics-processing unit: it takes two video inputs and mixes one input with the other. Mixing or blending of the video is managed by color keying or alpha-channel and is controlled via a simple software interface.

Capabilities provided by the PMC-285 are:

- ◆ The RGB input can be scaled and presented as a window within the contents of the DVI input. The position and size of the window is controlled in software. Scaling can be set to simply blend the RGB and DVI inputs without windowing.
- ◆ The PMC-285 provides format conversion by converting the analog RGB input to DVI output – this can be scaled so that, for example, a 640x480 RGB input can be converted and scaled to a 1024x768 DVI output.
- ◆ The video from either input can be ignored so that the PMC-285 is a video switch with one of the two inputs being routed to the output.

Mixing and scaling is performed in hardware so there is single-frame latency through the module. This means that the PMC-285 does not introduce significant delays to the video chain.

As a standard PMC module the PMC-285 can be installed in any system with a spare PMC site (on single board computers or carrier cards) and has a power dissipation of less than 10W.

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WRIGHT** **Controls**
Embedded Computing
cwembedded.com

For more complex windowing and mixing capabilities Curtiss-Wright Controls is pleased to offer the Cobra – visit cwcembedded.com for details of Cobra and other members of the video product family.

Specifications

- ◆ Two video inputs up to 1920x1200 or 1080p60 for scaling and windowing
 - Single-link DVI
 - Analog RGB
- ◆ Video output: single-link DVI up to 1920x1200 or 1080p60
- ◆ For full-screen mixing applications with no scaling, the PMC-285 can operate with video resolutions up to 2k x 2k with input on RGB and dual-link DVI and output on dual-link DVI
- ◆ Latency through PMC-285: one frame
- ◆ PCI interface
 - 32-bit 33MHz PCI – used for control and status information
- ◆ Software Support
 - Software support for Windows® and Linux® on x86 hosts
 - For PowerPC™ and VxWorks® support contact Curtiss-Wright Controls

Environmental

- ◆ Available in the following Curtiss-Wright Controls environmental grades:
 - Air-cooled Level 0
 - Operating temperature 0°C to +50°C
 - Storage temperature -40°C to +85°C
 - Conduction-cooled Level 200
 - Please contact the design center to discuss applications that would require a conduction-cooled PMC-285
- ◆ For further details please see Curtiss-Wright Controls Ruggedization Table

Figure 1: Example mixing application

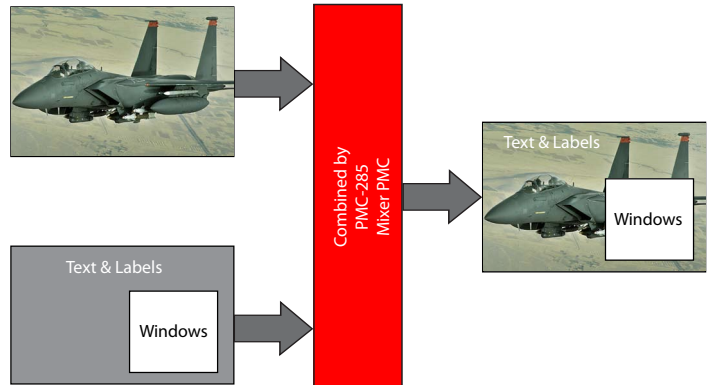


Figure 2: Example windowing application

