

# Simplified Flat Panel Setup

## Using a VersaLogic Embedded Computer and FPDs with FlatLink™ or Panel Link™



The VersaLogic Cobra provides integrated support for flat panels with FlatLink technology that simplify the process of adding a flat panel to the system.

With standard TTL flat panel interfaces, developers face a score of challenges to get the display up and running. A custom BIOS is usually required, the panel display is susceptible to noise if the cable is too long, and a custom cable may be necessary. There are no industry-wide standards for flat panel connectors with TTL interfaces, so matching the connector type provided with the panel to the receiver on a board can be a time-consuming project requiring hours of engineering time and costly customizations.

Recent changes in flat panel standards are good news for developers. Many flat panel manufacturers are moving from non-standardized TTL interfaces to industry-standard FPD connectors and FlatLink™ or Panel Link™ interfaces. This change can greatly simplify the process of installing and setting up a flat panel on an embedded system, at significant cost-savings. The use of newer LVDS signaling technology also reduces cable noise and allows the use of longer cables.

VersaLogic has integrated support for these types of flat panels into the BIOS for the VSBC-8, Jaguar, and Cobra. Additionally, a standard FPD connector plugs directly into the connector socket without the need for a custom cable or adapter.

The simplified process for installing and setting up a flat panel with BIOS support can be accomplished in a few basic steps:

**Table 1:** Flat Panel Displays with BIOS support

Manufacturer	Model #	Panel Size	Resolution	Interface	Panel Technology
eVision Displays	xxx084S01 series	8.4"	800 x 600 18-bit	LVDS	TFT
au Optronix	B084SN01	8.4"	800 x 600 18-bit	LVDS	TFT
eVision Displays	xxx104S01 series	10.4"	800 x 600 18-bit	LVDS	TFT
au Optronix	B104SN01	10.4"	800 x 600 18-bit	LVDS	TFT
eVision Displays	xxx141X01 series	14.1"	1024 x 768 18-bit	LVDS	TFT

1. Attach the FPD to SBC interface cable (contact VersaLogic Applications Support to identify the correct cable).
2. Set the jumper settings to the correct configuration for the resolution of the display.
3. Power up the board and select the display type in the CMOS settings screen.

Table 1 shows a list of flat panel displays known to be compatible with VersaLogic's Cobra, VSBC-8, Cheetah, Jaguar, Puma, and Gecko, all of which include integrated flat panel support. The flat panels known to work with each board and the relevant jumper settings are listed in the VersaLogic's product manuals, which are available online in PDF format from the support section of the VersaLogic website (<http://www.VersaLogic.com/Support/Manuals.asp>).

Resources:  
 Flat Panel Manufacturers:  
[www.evisiondisplays.com](http://www.evisiondisplays.com)  
[www.auo.com/english/](http://www.auo.com/english/)  
 FlatLink™ Technology:  
[www.ti.com](http://www.ti.com)  
 Panel Link™ Technology:  
[www.national.com](http://www.national.com)  
[www.amcc.com](http://www.amcc.com)  
 VersaLogic product manuals:  
[www.VersaLogic.com/support/manuals.asp](http://www.VersaLogic.com/support/manuals.asp)

VersaLogic has built its reputation on reliability through quality products and superior service. It works continuously with its customers and within the industry to promote the highest standards of product reliability. Part of this effort is VersaLogic's ongoing series of "Focus on Reliability" white papers, which are intended to provide guidance and information related to product reliability.

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