

Korry[®] Display Module (KDM) products KDM340 development kit with VP7 video processing module

(KDM340 3ATI development kit includes VP7 interface with standard video inputs

Integration with a VP7-3ATI video processing module makes interfacing with an Esterline KDM340 display a breeze, providing a versatile, simple-to-use development kit for simulators and other non-flight applications.

- Adjustments and reconfiguration in the field via utility software
- Supports windowing, frame rate conversion, resizing, and color conversions
- Standard inputs: TMDS or analog
- Non-interlaced and interlaced RGB I/O
- 3.07 x 3.07 x 2.23 inches

Since the KDM340 only accepts parallel RGB video, the VP7-3ATI processing module from Westar Display Technologies adapts analog video or TMDS digital video from a standard PC and lets you display a user-defined window directly on your KDM340 unit.

KDM340 development kit configurations

The KDM340 with VP7-3ATI comes as a standard configuration with both analog and DVI inputs. Development kits are available in the following configurations without a heater:

Brightness	NVIS Compatibility	KDM340 P/N	P/N (with VP7)
150 fL	non-NVIS	39390-001	48831-001
150 fL	NVIS	39389-001	48831-002
200 fL	non-NVIS	39388-001	48831-003
200 fL	NVIS	39387-001	48831-004

For more details, price quotes, or to discuss your requirements, please email korry.sales@esterline.com or call us at 425-297-9700.



Capabilities

Based on state-of-the-art image processing technology, VP7-3ATI capabilities include:

- Digitization of computer-generated video sources with separate syncs or sync-on-green
- Non-interlaced and interlaced RGB inputs and outputs
- Digitization and de-interlacing of consumer video formats, including RS-343 formats
- Frame rate conversion
- Independent horizontal and vertical scaling
- Programmable image position within larger background area for both input and output
- Incoming video gain and offset adjustments
- Programmable power sequencing to panel
- Fine-phase clock adjustment for pixel sampling
- Image reversible left to right and top to bottom
- Remote interface for both set-up and operational control
- Same fit as KDM340 envelope X and Y, with overall depth increase to 2.23 inches (56.5 mm)

The included VP7-3ATI video processing module is provided by Westar Display Technologies, Inc.

KDM340 development kit

VP7 configuration software

The VP7-3ATI video processing module comes with a VP7 configuration utility that runs on a Windows XP and connects to the VP7-3ATI through a RS-232 serial cable. This software uses a 4-step process to set up the VP7-3ATI for your application.



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Step 3: Windowing and scaling



Step 4: Power sequence

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Step	Function	Sets up
1	Input timing	the input timing and electrical definitions.
2	Output timing	the output timing and electrical definitions.
3	Windowing and scaling	the areas of interest within the input image and the mapping to the output resolution, thereby defining windowing and scaling functions.
4	Power sequence	the power and video sequencing to the KDM340 display.

VP7-3ATI specifications

Physical dimensions	2.9 x 3 x 0.8 inches
Temperature range	Operating: 0° C to +50° C; Storage: -20° C to +70° C
Video inputs	Up to SXGA resolutions @ 60Hz Analog input (110 MHz); DVI input (110 MHz) Standard and custom timing Syncs (digital separate, digital composite, analog composite)
Input power	+7 to +28 VDC, 4W power consumption @ XGA resolution (not including panel and backlight requirements)
Control interface	RS-232

Control interface



8-pin Hirose DF11 for discrete in and contrast J1 J2 10-pin Hirose DF11 for FPGA configuration J5 10-pin Hirose DF11 for RS-232 control J7 6-pin Hirose DF11 for power input J8 10-pin Hirose DF11 for input analog video J10 16-pin Hirose DF11 for discrete I/O to display J11 10-pin Hirose DF11 for control to display J12 32-pin Hirose DF11 for digital data to display J13 14-pin Hirose DF11 for LVDS output J16 14-pin Hirose DF11 for backlight inverter control J19 8-pin Hirose DF11 for BIOS table select J20 8-pin Hirose DF11 for external LED connection 12-pin Hirose DF11 for TMDS input J21 J22 4-pin Hirose DF11 for EDID interface

For more information about Korry displays, please contact us at 425-297-9700 or korry.sales@esterline.com.

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