



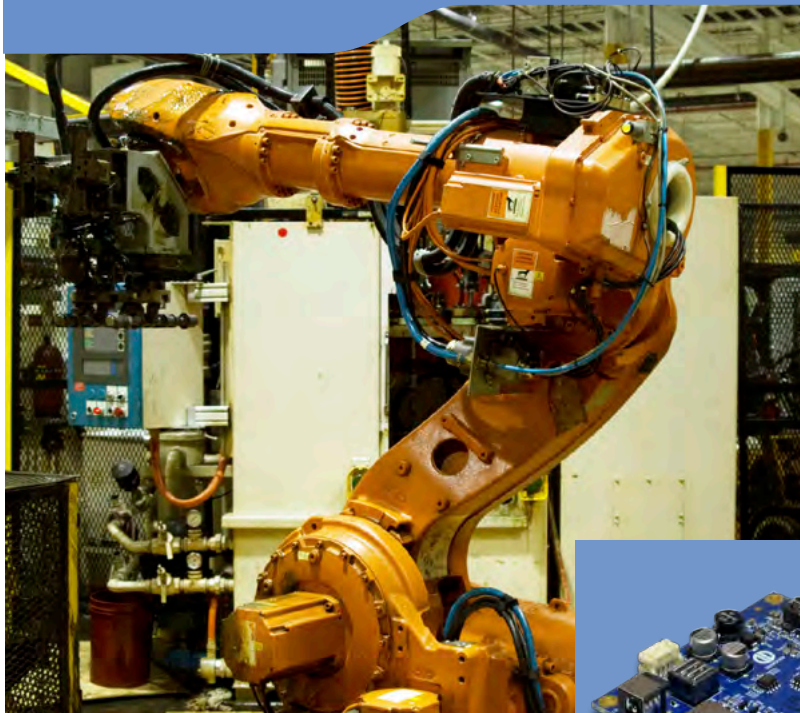
**DATA DISPLAY GROUP**

Digital Solutions for Business

# TFT-LCD Subsystem Builder – Industrial Converter Boards

**2017  
Product Guide**

[www.datadisplay-group.com](http://www.datadisplay-group.com)





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Prisma converter boards are best suited for:



and many more ...



## Data Display Group TFT controller - why?

Is there anyone with more experience? For more than two decades, the Data Display Group has developed and manufactured TFT-LCD controllers to industrial specifications. Today, the Data Display Group is a leading supplier of industrial TFT-LCD controllers, interface boards, media player and related accessories with design teams in Europe and USA.

Beginning in 1993, the Data Display Group has helped its industrial customers meet their specified requirements. Our outstanding product reliability is the result of our proven design process, carefully selected industrial electronic components and thorough quality testing. As manufacturer, we guarantee stable products and long term availability.










## Customized solutions .....

Hundreds of thousands of Data Display Group TFT-LCD controllers have been integrated into industrial display solutions for countless customers over the years. Applications for our controllers include: machine control, ticket machines, digital signage, medical imaging, military, transportation, control rooms, process monitoring and many more.

In addition, our global design team has developed custom display solutions for leading companies around the world. The projects range from adjustments to firmware to customized hardware and software solutions. Our design teams, located in Europe and USA are looking forward to customizing solutions for you.







TFT-LCD Controller Range for standard video signals (overview)

Version	Photo	Panel Resolution	Input signals	Features
<b>Prisma-III A</b>	 150.0mm x 110.0mm	VGA to WUXGA  640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• VGA analog</li> <li>• DVI (HDMI 1.4/HDCP)</li> <li>• HDMI 1.4/HDCP - AUX</li> <li>• Composite Video</li> <li>• S-Video</li> <li>• Component Video (YPbPr)</li> </ul>	<ul style="list-style-type: none"> <li>• LVDS 18 / 24 / 30-bit single / dual conventional / non-conventional</li> <li>• MarsRover software</li> <li>• RS232 remote control</li> <li>• 24V option</li> </ul>
<b>Prisma MEDIA-II</b>	 265.3mm x 167.6mm	VGA to WUXGA  640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• Display Port</li> <li>• 2 x HDMI 1.4/HDCP or 2 x DVI</li> <li>• 3G SDI (option)</li> <li>• Composite Video</li> <li>• S-Video</li> <li>• Component Video (YPbPr)</li> </ul>	<ul style="list-style-type: none"> <li>• LVDS 18 / 24 / 30-bit single / dual conventional / non-conventional</li> <li>• RS232 remote control</li> <li>• 24V option</li> <li>• Audio output</li> </ul>
<b>Prisma MEDIA-Eco</b>	 160.0mm x 100.0mm	VGA to WUXGA  640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• VGA analog</li> <li>• DVI or HDMI 1.4</li> <li>• Display Port</li> </ul>	<ul style="list-style-type: none"> <li>• LVDS (single / dual, 18/24 bit; conventional / non-conventional)</li> <li>• ChandlerRover software</li> <li>• RS232 remote control</li> <li>• Audio option</li> </ul>
<b>Prisma ECO-IV</b>	 126.4mm x 100.8mm	VGA to WUXGA  640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• VGA analog</li> <li>• DVI HDMI</li> </ul>	<ul style="list-style-type: none"> <li>• LVDS (single / dual, 18/24 bit; conventional / non-conventional)</li> <li>• ChandlerRover software</li> </ul>
<b>Prisma ECO-eDP</b>	 100.0mm x 80.0mm	VGA to WUXGA  640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• DVI or HDMI 1.4</li> <li>• Display Port</li> </ul>	<ul style="list-style-type: none"> <li>• 2-lane embedded Display Port (eDP)</li> <li>• ChandlerRover software</li> <li>• RS232 remote control</li> </ul>
<b>Prisma COMPACT Media</b>	 130.0mm x 70.0mm	VGA to WUXGA  640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• VGA analog</li> <li>• HDMI 1.4</li> <li>• Display Port</li> </ul>	<ul style="list-style-type: none"> <li>• LVDS (single / dual, 18/24 bit; conventional / non-conventional)</li> <li>• ChandlerRover software</li> <li>• RS232 remote control</li> </ul>
<b>Prisma MOBILITY</b>	 195.6mm x 157.0mm	VGA to WUXGA  640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• VGA analog</li> <li>• DVI or HDMI 1.4 in</li> <li>• DVI or HDMI 1.4 out</li> <li>• Daisy chain wiring</li> </ul>	<ul style="list-style-type: none"> <li>• LVDS (single / dual, 18/24 bit; conventional / non-conventional)</li> <li>• RS232 remote control</li> <li>• Wide input voltage range from 18V to 36V</li> </ul>



TFT-LCD Controller Range for standard video signals (overview)

Version	Photo	Panel Resolution	Input signals	Features
<b>Prisma MOBILITY-II</b>	 <p>150.0mm x 130.0mm</p>	VGA to WUXGA 640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• DisplayPort</li> <li>• DVI-I (HDMI 1.4 or analog VGA)</li> <li>• CVBS, S-Video or Component Video</li> </ul>	<ul style="list-style-type: none"> <li>• LVDS (single / dual, 18/24 bit; conventional / non-conventional)</li> <li>• MarsRover software</li> <li>• RS232 remote control</li> <li>• Wide input voltage range from 9V to 36V</li> <li>• Advanced diagnostics and failure monitoring</li> </ul>
<b>Announcement: Prisma-4k</b>		up to 4096 x 2160 @60Hz (4k)	<ul style="list-style-type: none"> <li>• V-by-One (8xLane)</li> <li>• eDP (4xLane)</li> </ul>	<ul style="list-style-type: none"> <li>• Samples Q2/2017</li> </ul>
<b>Prisma MINI</b>	 <p>65.0mm x 60.0mm</p>	VGA to WXGA 640 x 480 to 1366 x 768	<ul style="list-style-type: none"> <li>• HDMI 1.4 or DisplayPort</li> </ul>	<ul style="list-style-type: none"> <li>• single LVDS</li> <li>• ChandlerRover software</li> </ul>
<b>PrismaMINI-HDMI-DP</b>	 <p>75.0mm x 60.0mm</p>	VGA to WUXGA 640 x 480 to 1920 x 1200	<ul style="list-style-type: none"> <li>• HDMI 1.4</li> <li>• DisplayPort</li> </ul>	<ul style="list-style-type: none"> <li>• single/dual LVDS</li> <li>• ChandlerRover software</li> </ul>
<b>Prisma Custom</b>				



## Configuration-Software MarsRover & ChandlerRover

**Our new software enables easy configuration of our Prisma TFT controller boards according to your requirements. Two versions are available:**

### **MarsRover**

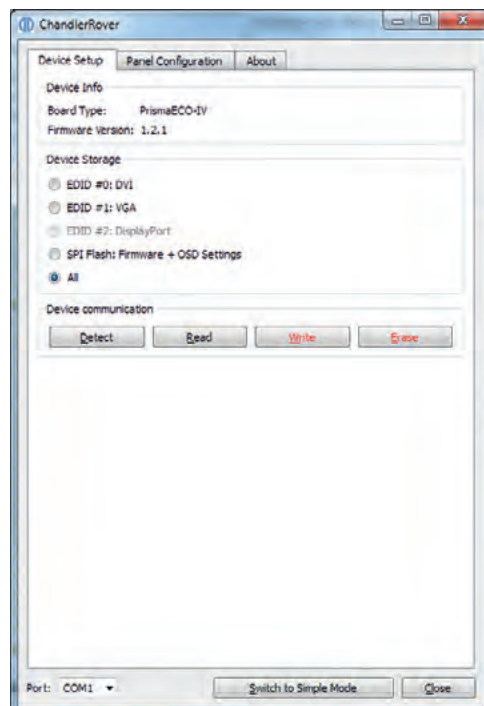
for Prisma-IIIA and PrismaMOBILITY-II

### **ChandlerRover**

for PrismaMEDIA-Eco, PrismaECO-eDP, PrismaECO-IV, PrismaCOMPACT-Media and PrismaMINI

**The software enables configuring the following board features:**

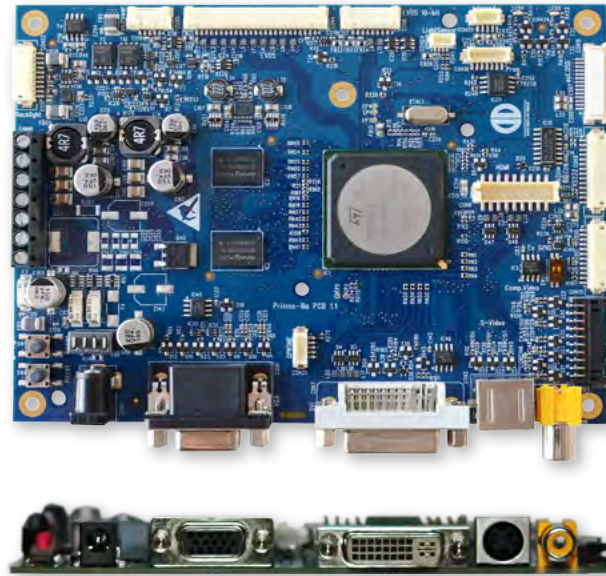
- LVDS timing (with spread spectrum for increased EMI performance)
- Power Sequencing (T-CON, BLU, PSU remote signal on screw terminal)
- T-CON supply voltage is configurable for 3.3V / 5.0V or 12V
- Backlight unit (BLU) control (ANA/PWM, 3.3V/5V min/max, with pixel dimming)
- Adjustable LVDS option pins (e.g. for reverse scan, JEIDA/VESA mapping, H/L, 3.3V or 5V level)
- Configuration can be saved as XML file for future use
- OSD setup and user data can be saved and re-used
- Firmware and EDID can be updated easily
- operation hour counter (analyzable separately for display and backlight)
- the user can chose the active input interfaces  
(for shorter switching periods when searching for an input source)





## Prisma-III A

Order No.: PR-01-xxx



**Prisma-III A offers top performance for all applications. Industrial controller with VGA, DVI/HDMI and Analog Video input. It supports panels up to 1920 x 1200 resolution with LVDS signals.**

**Applications:** Industrial, Monitoring and Control, Medical, Military, AV

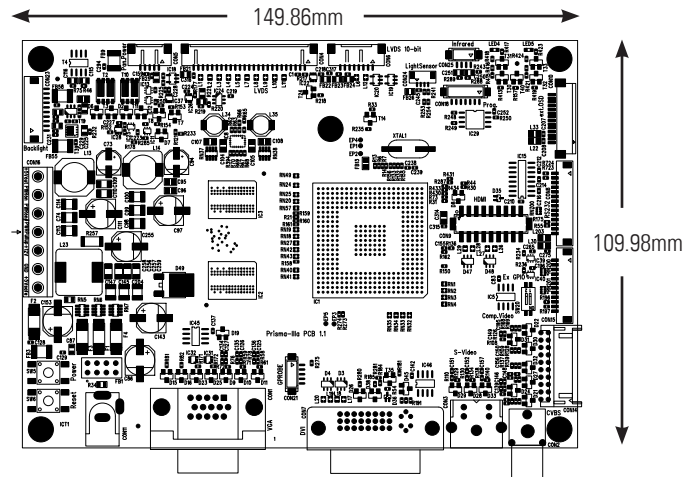
### Key Functions:

- RGB/VGA, DVI/HDMI over DVI, S-Video, Composite Video, Component Video
- True High Definition 1080p on DVI connector, supporting HDMI 1.4 inputs
- HDCP support
- Zoom and shrink scaling
- Panel timing, panel supply voltage configuration, converter control, video modes, timer etc. with MarsRover software
- PWM or voltage controlled backlight intensity
- Four/six button OSD - keypad interface
- Powerful PiP/PaP/Tiling functions
- RS232 remote control capability
- Extended temperature range (option)
- Operation-hour counter (option)
- Automatic backlight dimming with ambient light sensor (option)



**Accessories:**

- ALS Ambient Light Sensor
- 4-button or 6-button OSD menu extension board
- IR Amplifier for remote control
- Inverter Cables
- LVDS Cables
- Analog Video Adapter Cable
- Power supplies



Input Signals	1 x VGA, 1 x DVI/HDMI via DVI, 1 x HDMI-Aux 2 x Composite, 1 x S-Video, 1 x Component / RGB CS max. 8 x S-Video (option) max. 8 x Composite (option)
HDCP Support	Yes
Panel Signals	18/24 bit LVDS, single / dual, TTL (option)
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	12V DC, 24V DC (option) +5V Stby supported
Power Consumption	4.2 Watts (board only)
Panel Power Support	3.3V, 5V, 12V
RS 232	Remote Control
Special Settings	PIP, PaP, Tiling, Bypass mode - no buffer
Operating Temperature	0° to + 70°C / 32° to +158°F -20° to + 70°C / -4° to +158°F (option)
RoHS compliant	yes
Configuration Software	MarsRover

Input Video Signal Specification:

VGA:  
WUXGA/FHD @ 60 Hz, other resolutions @ 60 Hz or 75 Hz.

DVI / HDMI (1.4) Graphic:  
WUXGA/FHD @ 60 Hz, other resolutions @ 60 Hz or 75 Hz.

HDMI Video:  
720 x 480 @ 60 Hz    720 x 576 @ 50 Hz  
1280 x 720 @ 50 Hz    1280 x 720 @ 60 Hz  
1920 x 1080 @ 50 Hz    1920 x 1080 @ 60 Hz

S-Video, Composite, RGB+CS:  
720 x 480 @ 30 Hz (i) (NTSC)  
720 x 576 @ 25 Hz (i) (PAL)

Component Video:  
720 x 240 @ 30 Hz (i) up to 1920 x 1080 @ 60 Hz

Standard resolutions: <sup>1</sup>

640 x 480	1366 x 768
800 x 600	1368 x 768
1024 x 768	1600 x 1200
1280 x 768	1920 x 1080
1280 x 1024	1920 x 1200
1360 x 768	

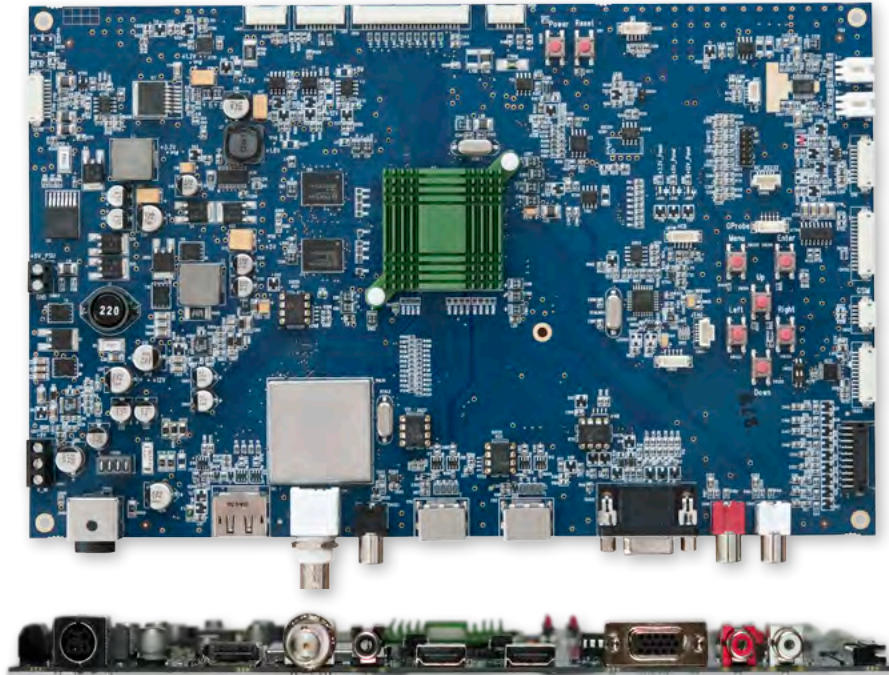
Prisma-IIIa supports other resolutions like 1920 x 1440 and 2128 x 1200. Please refer to to data sheet.





## PrismaMEDIA-II

Order No.: PR-01-xxx



**PrismaMEDIA-II is a high-end controller for multimedia applications with VGA, HDMI/DVI, DisplayPort, 3G SDI and Analog Video input. It supports panels up to 1920 x 1200 resolution with LVDS signal.**

**Applications:** AV, Digital Signage

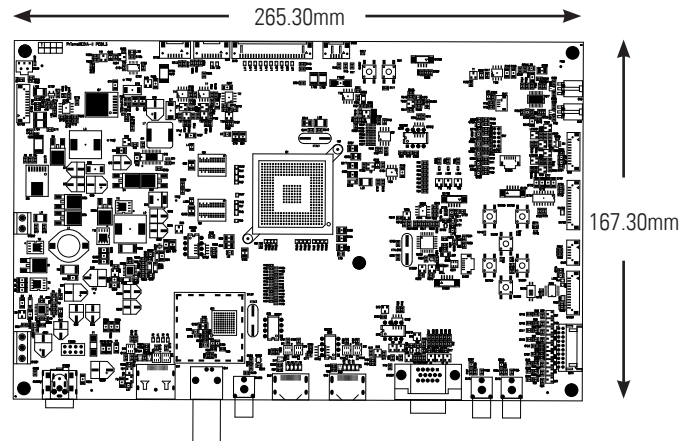
### Key Functions:

- RGB/VGA, HDMI, DisplayPort, 3G SDI (option), S-Video, Composite Video, Component Video
- True High Definition 1080p on DVI connector, supporting HDMI 1.4 inputs
- HDCP support
- Zoom and shrink scaling
- PWM or voltage controlled backlight intensity
- Six button OSD - keypad interface and on-screen menus
- Powerful PiP/tiling functions
- RS232 remote control capability
- 2 Watt stereo audio output
- Automatic backlight dimming with ambient light sensor (option)



**Accessories:**

- ALS Ambient Light Sensor
- 6-button OSD menu extension board
- IR Amplifier for remote control
- Inverter Cables
- LVDS Cables
- Analog Video Adapter Cable
- Power supplies



Input Signals	1 x VGA, 2 x HDMI 1.4, 1 x DisplayPort, 2 x S-video 2 x Composite video, 1 x Component video 1 x 3G SDI (option) max. 4 x S-Video (option) max. 8 x Composite (option)
HDCP Support	Yes
Panel Signals	18/24-bit LVDS, single / dual
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	12V DC, 24V DC (option)
Power Consumption	3.7 Watts (board only)
Panel Power Support	3.3V, 5V, 12V
RS 232	Remote OSD Control
Special Settings	PiP, Tiling, Bypass Mode - no buffer
Operating Temperature	0° to + 70°C 32° to +158°F
RoHS compliant	yes

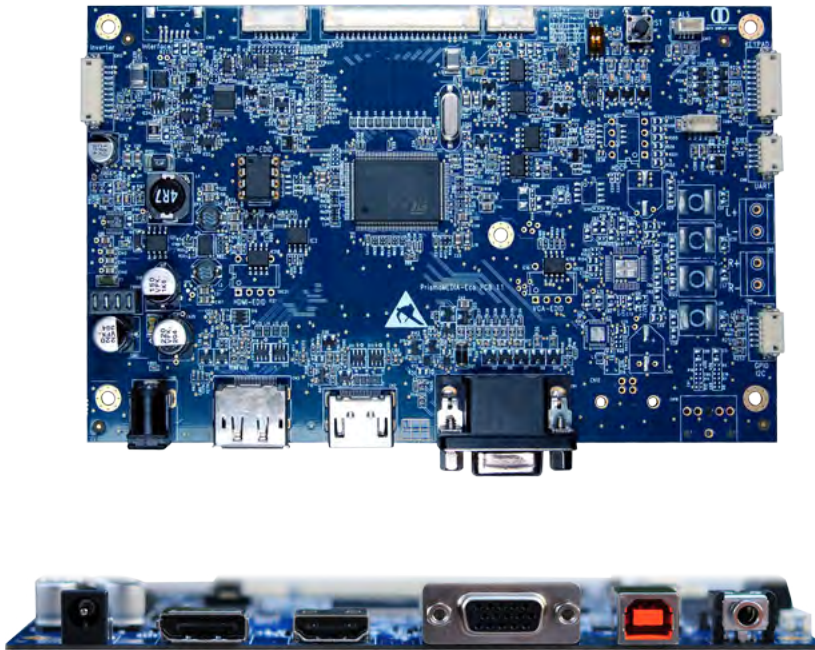
<p>Input Video Signal Specification:</p> <p>VGA: WUXGA/FHD @ 60 Hz, other resolutions @ 60Hz or 75 Hz.</p> <p>HDMI (1.4) Graphic: WUXGA/FHD @ 60 Hz, other resolutions @ 60 Hz or 75 Hz.</p> <p>HDMI Video and 3G SDI: 720 x 480 @ 60 Hz    720 x 576 @ 50 Hz 1280 x 720 @ 50 Hz    1280 x 720 @ 60 Hz 1920 x 1080 @ 50 Hz    1920 x 1080 @ 60 Hz (HDMI only)</p> <p>DisplayPort 1.1: 640 x 480 @ 60 Hz up to 2048 x 1536 @ 60 Hz</p> <p>S-Video, CVBS, RGB+CS: 720 x 480 @ 30 Hz (i) (NTSC) 720 x 576 @ 25 Hz (i) (PAL)</p> <p>Component Video: 720 x 240 @ 30 Hz (i) up to 1920 x 1080 @ 60 Hz</p>												
<p>Standard resolutions: <sup>1</sup></p> <table> <tr> <td>640 x 480</td> <td>1280 x 1024</td> <td>1600 x 1200</td> </tr> <tr> <td>800 x 600</td> <td>1360 x 768</td> <td>1920 x 1080</td> </tr> <tr> <td>1024 x 768</td> <td>1366 x 768</td> <td>1920 x 1200</td> </tr> <tr> <td>1280 x 768</td> <td>1368 x 768</td> <td></td> </tr> </table>	640 x 480	1280 x 1024	1600 x 1200	800 x 600	1360 x 768	1920 x 1080	1024 x 768	1366 x 768	1920 x 1200	1280 x 768	1368 x 768	
640 x 480	1280 x 1024	1600 x 1200										
800 x 600	1360 x 768	1920 x 1080										
1024 x 768	1366 x 768	1920 x 1200										
1280 x 768	1368 x 768											

Prisma-MEDIA-II supports other resolutions like 1920 x 1440 and 2128 x 1200. Please refer to data sheet.



## PrismaMEDIA-Eco

Order No.: PR-01-xxx



**PrismaMEDIA-Eco is a powerful, but cost-efficient multi-media controller with VGA, DVI/HDMI and DisplayPort input. It supports panels up to 1920 x 1200 resolution with LVDS signals. Audio support with 2 x 5W active stereo (option)**

**Applications:** Industrial, Monitoring and Control, Medical, Military, AV

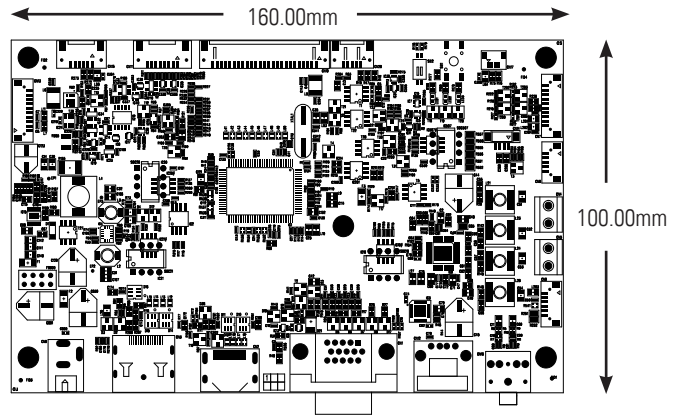
### Key Functions:

- RGB/VGA, DVI / HDMI over DVI, DisplayPort
- True High Definition 1080p on HDMI connector, supporting DVI inputs
- HDCP support
- Zoom and shrink scaling
- PWM or voltage controlled backlight intensity
- Panel timing, panel supply voltage, converter control and configuration with ChandlerRover software.
- Four or six button OSD - keypad interface and on-screen menus
- USB remote control capability (option)
- 2 x 5 Watts stereo amplifier (option)
- Automatic backlight dimming with ambient light sensor (option)



**Accessories:**

- ALS Ambient Light Sensor
- 4 or 6-button OSD menu extension board
- IR Amplifier for remote control
- Inverter Cables
- LVDS Cables
- Power supplies



Input Signals	1 x VGA, 1 x DVI over HDMI, 1 x HDMI 1.4 1 x DisplayPort
HDCP Support	Yes
Panel Signals	18/24-bit LVDS, single / dual
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	12V DC
Power Consumption	3.2 Watts (board only)
Panel Power Support	3.3V, 5V, 12V
RS 232	Remote OSD Control
Audio Support	through HDMI, 2 x 5 Watts amplifier (option), headphone output
USB (option)	Remote OSD Control
Operating Temperature	-20° to + 80°C - 4° to + 176°F
RoHS compliant	yes
Configuration Software	ChandlerRover

Input Video Signal Specification:

VGA:

60 Hz @ WUXGA and FHD, 60 Hz or 75 Hz @ other resolutions.

DVI / HDMI 1.4 Graphic:

60 Hz at WUXGA and FHD, 60 Hz or 75 Hz at other resolutions.

HDMI Video:

720 x 480 @ 60 Hz    720 x 576 @ 50 Hz  
1280 x 720 @ 50 Hz    1280 x 720 @ 60 Hz  
1920 x 1080 @ 50 Hz    1920 x 1080 @ 60 Hz

DisplayPort 1.1a:

640 x 480 @ 60 Hz up to 2560 x 1600 @ 60 Hz

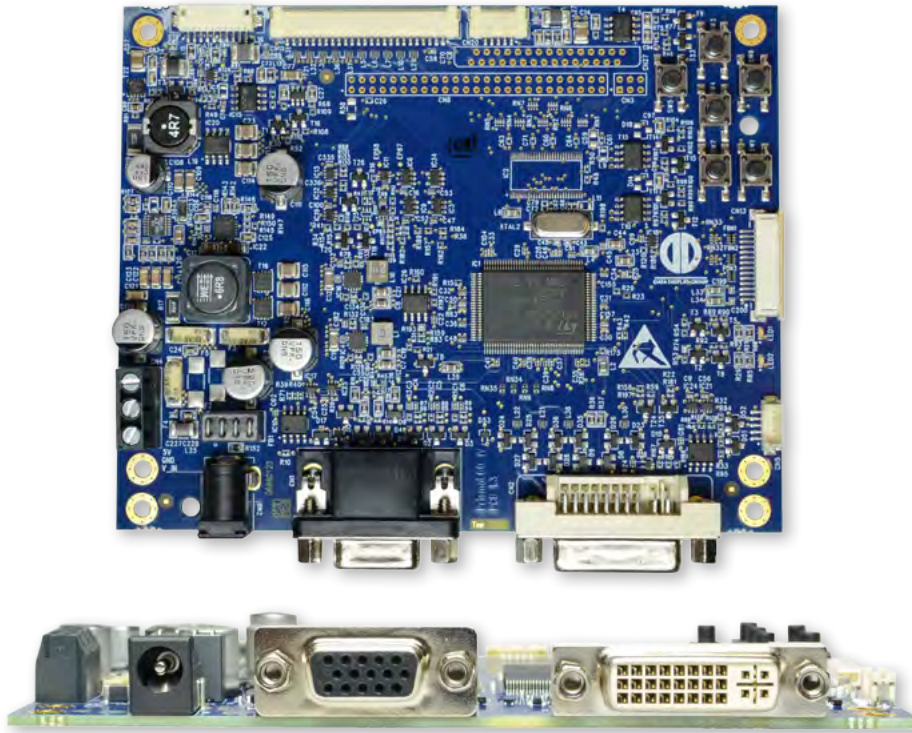
Standard resolutions:

640 x 480    1366 x 768  
800 x 600    1368 x 768  
1024 x 768    1600 x 1200  
1280 x 768    1920 x 1080  
1280 x 1024    1920 x 1200  
1360 x 768



## PrismaECO-IV

Order No.: PR-02-xxx



**PrismaECO-IV is an industrial space and cost saving controller with VGA, DVI /HDMI over DVI input. It supports panels up to WUXGA 1920 x 1200 resolution with LVDS signal.**

**Applications:** Industrial, Monitoring and Control, Medical, Military

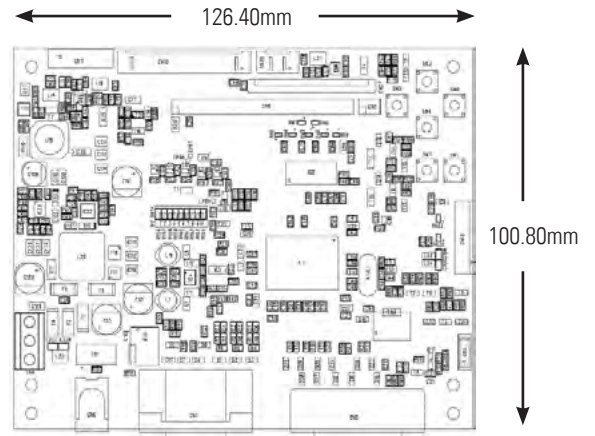
### **Key Functions:**

- RGB/VGA, DVI/HDMI over DVI
- PWM or voltage controlled backlight intensity
- Four button OSD on board, additional keypad interface
- Supports panel resolutions up to WUXGA @ 60 Hz



**Accessories:**

- 4-button OSD menu extension board
- Inverter Cables
- LVDS Cables
- Power supplies



Input Signals	VGA, DVI/HDMI over DVI
HDCP Support	No
Panel Signals	18/24-bit LVDS (single/dual)
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	12V DC, 24V DC (option)
Power Consumption	1.8 Watts (board only)
Panel Power Support	3.3V, 5V, 12V
OSD	4-button on board, 4-button extension board (option)
Operating Temperature	-20° to + 80°C - 4° to + 176°F
RoHS compliant	yes
Configuration Software	ChandlerRover

Input Video Signal Specification:
VGA: WUXGA @ 60 Hz, SXGA @75 Hz With signal auto detection.
DVI / HDMI(1.4) Graphics: WUXGA @ 60 Hz, SXGA @75 Hz With signal auto detection.
Standard resolutions: <sup>1</sup>
640 x 480 @ 60 Hz (VESA)      1360 x 768 @ 60 Hz
800 x 600 @ 60 Hz (VESA)      1366 x 768 @ 60 Hz
1024 x 768 @ 60 Hz (VESA)      1368 x 768 @ 60 Hz
1280 x 768 @ 60 Hz              1600 x 1200 @ 60 Hz (VESA)
1280 x 800 @ 60 Hz              1920 x 1200 @ 60 Hz
1280 x 1024 @ 60 Hz (VESA)      1920 x 1080 @ 60 Hz

<sup>1</sup> PrismaECO-IV supports all standard VESA resolutions up to WUXGA. Please refer to data sheet.



## PrismaECO-eDP

Order No.: PR-02-190



**PrismaECO-eDP is a competitive, space-saving and efficient multimedia board. It supports panels up to WUXGA 1920 x 1200 resolution with embedded Display Port (eDP) output.**

**Applications:** Industrial, Monitoring and Control, Medical, Military

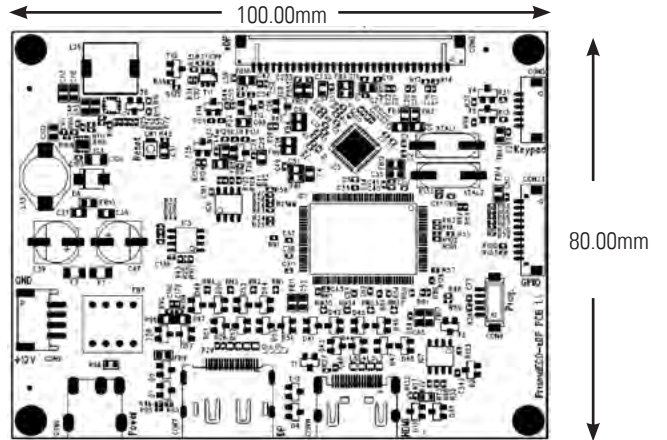
### Key Functions:

- embedded DisplayPort (eDP) - output
- True High Definition 1080p on HDMI connector, supporting DVI inputs
- HDCP support
- Zoom and shrink scaling
- PWM or voltage controlled backlight intensity
- Panel timing, panel supply voltage, converter control and configuration with ChandlerRover software.
- 4-button OSD - keypad interface and on-screen menus
- Slim design with a height of 10mm



**Accessories:**

- ALS Ambient Light Sensor
- 4-button OSD menu extension board
- Power supplies



Input Signals	1 x HDMI 1 x DisplayPort
HDCP Support	Yes
Panel Signals	1 or 2 lane eDP
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	12V DC
Power Consumption	tbd
Panel Power Support	3.3V
RS 232	Remote OSD Control
Operating Temperature	-20° to + 80°C / -4° to +176°F
RoHS compliant	yes
Configuration Software	ChandlerRover

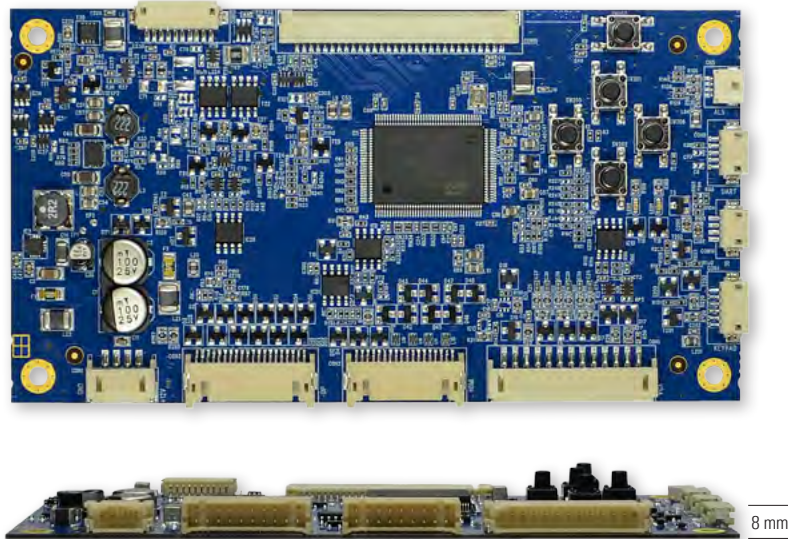
<p>Input Video Signal Specification:</p> <p>HDMI 1.4 Graphic: 640 x 480 @ 60 Hz up to 1920 x 1080 @ 60 Hz</p> <p>HDMI Video: 720 x 480 @ 60 Hz    720 x 576 @ 50 Hz 1280 x 720 @ 50 Hz    1280 x 720 @ 60 Hz 1920 x 1080 @ 50 Hz    1920 x 1080 @ 60 Hz</p> <p>DisplayPort 1.1a: 640 x 480 @ 60 Hz up to 1920 x 1080 @ 60 Hz</p>												
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1280 x 1024	1920 x 1200											
1360 x 768												





## PrismaCOMPACT-Media

Order No.: PR-02-xxx



**Industrial PrismaCOMPACT-Media with VGA, HDMI/DVI and DisplayPort input is a compact and cost efficient board with a total height of just 8 mm. It supports panels up to WUXGA 1920 x 1200 resolution with LVDS signals.**

**Applications:** Industrial, Monitoring and Control, Medical, AV

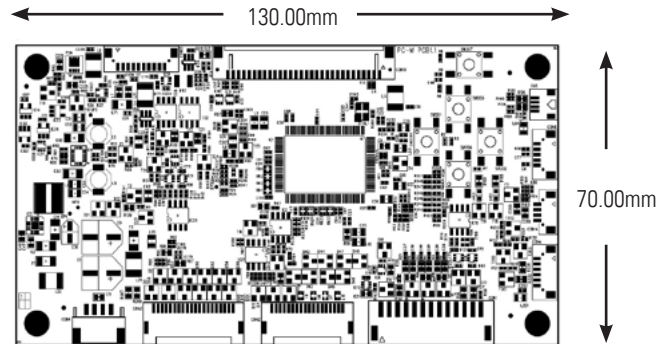
### Key Functions:

- RGB/VGA, HDMI/DVI, DisplayPort
- True High Definition 1080p on DVI connector, supporting HDMI 1.4 inputs
- PWM or voltage controlled backlight intensity
- Four button OSD on board, additional keypad interface
- Remote OSD via RS232 or USB
- Adjustable panel timing, panel supply voltage configuration and converter control with CandlerRover software
- Zoom and shrink scaling
- Ultra-slim design with a height of 8 mm
- Automatic backlight dimming with ambient light sensor (option)



**Accessories:**

- ALS Ambient Light Sensor
- 4-button OSD menu extension board
- IR Amplifier for remote control
- Input connector board and cable set
- Inverter Cables
- LVDS Cables
- Power supplies



Input Signals	1 x VGA, 1 x DVI/HDMI via DVI, 1 x DisplayPort
HDCP Support	Yes
Panel Signals	18/24-bit LVDS, single / dual
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	12V DC
Power Consumption	3.2 Watts (board only)
Panel Power Support	3.3V, 5V
RS 232	Remote OSD Control
USB	Remote OSD Control
Operating Temperature	0° to + 70°C / 32° to +158°F
RoHS compliant	yes
Configuration Software	ChandlerRover

Input Video Signal Specification:

VGA:  
60 Hz @ WUXGA and FHD, 60 Hz or 75 Hz @ other resolutions.

DVI / HDMI 1.4 Graphic:  
60 Hz at WUXGA and FHD, 60 Hz or 75 Hz at other resolutions.

HDMI Video:  
720 x 480 @ 60 Hz    720 x 576 @ 50 Hz  
1280 x 720 @ 50 Hz    1280 x 720 @ 60 Hz  
1920 x 1080 @ 50 Hz    1920 x 1080 @ 60 Hz

DisplayPort 1.1a:  
640 x 480 @ 60 Hz up to 2048 x 1536 @ 60 Hz

Standard resolutions:

640 x 480	1366 x 768
800 x 600	1368 x 768
1024 x 768	1600 x 1200
1280 x 768	1920 x 1080
1280 x 1024	1920 x 1200
1360 x 768	

Input connector board (option):





## PrismaMOBILITY

Order No.: PR-02-xxx



**Industrial PrismaMOBILITY with RJ45 connectors for HDMI/DVI signals and daisy-chain wiring with standard Ethernet cables. Maximum cable length for Full-HD resolution is 30m. It supports panels up to WUXGA 1920 x 1200 resolution with LVDS signals.**

**Applications:** Industrial, Automotive, Transportation, Avionic, AV

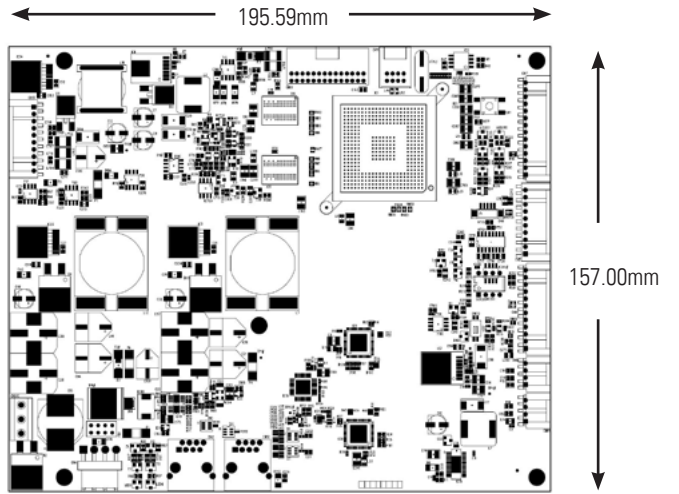
### Key Functions:

- HDMI/DVI in/out with RJ45 connector
- True High Definition 1080p on DVI connector, supporting HDMI 1.4 inputs
- HDCP support
- PWM or voltage controlled backlight intensity
- Wide input voltage range from 18V - 36V
- Temperature controlled operation
- Six button OSD on board, additional keypad interface
- Remote OSD via RS232
- Zoom and shrink scaling



**Accessories:**

- ALS Ambient Light Sensor
- 6-button OSD menu extension board
- IR Amplifier for remote control
- Interface board DVI/HDMI to RJ45
- Inverter Cables
- LVDS Cables
- Power supplies



Input/Output Signals	1 x DVI/HDMI in 1 x DVI/HDMI out
Wiring	Daisy-chain with RJ45 cables
Cable length	Max. 30m at 1920 x 1080 Longer distances at lower resolution
HDCP Support	Yes
Panel Signals	18/24-bit LVDS, single / dual
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	18V - 36V DC
Power Consumption	3.2 Watts (board only)
Panel Power Support	3.3V, 5V, 12V
RS 232	Remote OSD Control
Operating Temperature	-20° to + 75°C / -4° to +167°F
RoHS compliant	yes

Input Video Signal Specification:

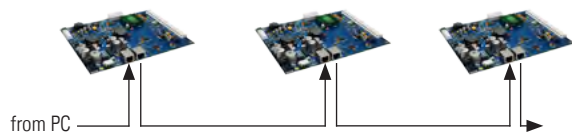
DVI / HDMI 1.4 Graphic:  
60 Hz at all standard resolutions.

HDMI Video:  
720 x 480 @ 60 Hz    720 x 576 @ 50 Hz  
1280 x 720 @ 50 Hz    1280 x 720 @ 60 Hz  
1920 x 1080 @ 50 Hz    1920 x 1080 @ 60 Hz

Standard resolutions:

640 x 480    1366 x 768  
800 x 600    1368 x 768  
1024 x 768    1600 x 1200  
1280 x 768    1920 x 1080  
1280 x 1024    1920 x 1200  
1360 x 768

Daisy-chain wiring:





## PrismaMOBILITY-II

Order No.: PR-02-xxx



**PrismaMOBILITY-II offers top performance for all applications. Industrial controller with DVI-I (DVI/HDMI/RGB), DisplayPort and Analog Video input. It supports panels up to WUGA 1920 x 1200 resolution with LVDS signals.**

**Applications:** Industrial, Automotive, Transportation, Avionic, AV

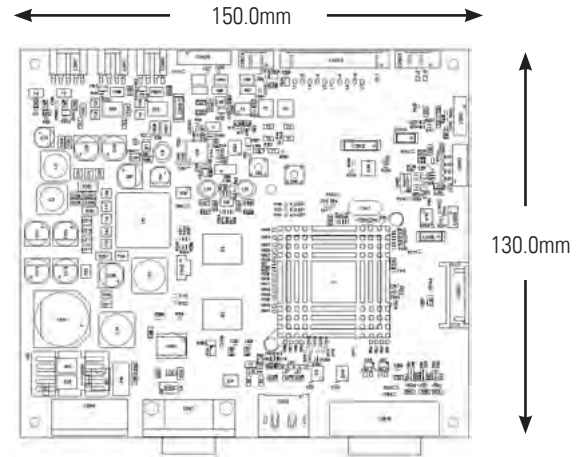
### Key Functions:

- RGB/VGA, DVI/HDMI, S-Video, Composite Video, Component Video
- True High Definition 1080p on DVI connector, supporting HDMI 1.4 inputs
- HDCP support
- Zoom and shrink scaling
- Panel timing, panel supply voltage configuration, converter control, video modes, timer etc. with MarsRover software
- Wide input voltage range 9 - 36V; Special power design for automotive applications
- Advanced diagnostics and failure monitoring
- PWM or voltage controlled backlight intensity
- Four/six button OSD - keypad interface
- Powerful PiP/PaP/Tiling functions
- RS232 remote control capability
- Extended temperature range (option)
- Operation-hour counter (option)



**Accessories:**

- 4-button OSD menu extension board
- Inverter Cables
- LVDS Cables
- Power supplies



Input Signals	VGA, DVI/HDMI, DisplayPort
HDCP Support	No
Panel Signals	18/24-bit LVDS (single/dual), single TTL
Panel Resolution	VGA to WUXGA (1920 x 1200)
Power Supply	8V DC to 36V DC
Power Consumption	3.6 Watts (board only)
Panel Power Support	3.3V, 5V, 12V
OSD	4-button on board, 4-button extension board (option)
Operating Temperature	0° to + 75°C 32° to +167°F
RoHS compliant	yes
Configuration Software	MarsRover

<p>Input Video Signal Specification:</p> <p>VGA: 60 Hz at all standard resolutions <sup>1</sup>.</p> <p>DisplayPort 1.1a: 640 x 480    1366 x 768 800 x 600    1368 x 768 1024 x 768    1600 x 1200 1280 x 1024    1920 x 1200 1360 x 768    1920 x 1080    all @ 60Hz</p> <p>DVI / HDMI 1.4 Graphic: 60 Hz at all standard resolutions <sup>1</sup>.</p> <p>HDMI Video: 720 x 480 @ 60 Hz    720 x 576 @ 50 Hz, 1280 x 720 @ 50 Hz    1280 x 720 @ 60 Hz, 1920 x 1080 @ 50 Hz    1920 x 1080 @ 60 Hz</p>
<p>Standard resolutions: <sup>1</sup></p> <p>640 x 480    1366 x 768 800 x 600    1368 x 768 1024 x 768    1600 x 1200 1280 x 768    1920 x 1200 1280 x 1024    1920 x 1080 1360 x 768</p>



## PrismaMINI

Order No.: PR-02-xxx



**Industrial PrismaMINI is a small and very cost efficient custom controller concept for projects with higher volumes. We offer selected PrismaMINI standard versions but the final functions of this innovative TFT controller will be tailored to meet your own specific project requirements. Various input signals are available. Support of panels up to WXGA 1366 x 768 resolution with LVDS signals.**

**Applications:** Industrial, Transportation, Consumer

### Selectable Functions and Features:

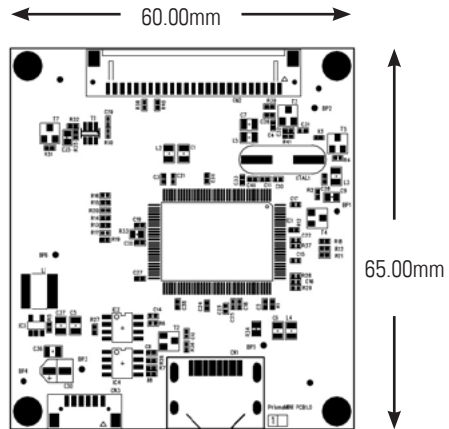
- VGA, HDMI, DVI, or DisplayPort
- True High Definition 1080p on HDMI connector, supporting DVI
- HDCP support
- PWM controlled backlight intensity
- DDC interface to control image parameter
- Remote OSD via RS232
- Reference designs for fast custom implementations
- Available standard versions: PrismaMINI-HDMI and PrismaMINI-HDMI-DP (HDMI, DisplayPort)

We can supply series-production PrismaMINI kit solutions or a „Proof-of-Concept“ kit (based on a PrismaMINI-HDMI) with one of the following TFTs: Ampire: AM1280800P2TZQW-00H, AM-1280800P3TZQW-00H & AM-1280800P3TZQW-10H, AUO: G084SN05V9 & G101EVN01.0, Innolux: G070Y2-L01, G104X1-L03, G104X1-L04 & G12111-L01, LG: LB121S03-TL04, NLT: NLB150XG01L-01, Mitsubishi: AA050MG03, Sharp: LQ150X1LG71, SGD: GKTV57NNBG1E0



**Accessories:**

- Inverter Cables
- LVDS Cables
- Power supplies



Input Signals	1 x HDMI
HDCP Support	Yes
Panel Signals	18/24-bit LVDS, single
Panel Resolution	VGA to WXGA (1366 x 768)
Power Supply	3.3V
Power Consumption	0.6 Watts (board only)
Panel Power Support	3.3V
RS 232	Remote OSD Control
Operating Temperature	-20° to + 80°C - 4° to + 176°F
RoHS compliant	yes
Configuration Software	ChandlerRover

Input Video Signal Specification:

DVI / HDMI 1.4 Graphic:  
60 Hz at WUXGA and FHD, 60 Hz or 75 Hz at other resolutions.

HDMI Video:  
720 x 480 @ 60 Hz, 720 x 576 @ 50 Hz,  
1280 x 720 @ 50 Hz, 1280 x 720 @ 60 Hz,  
1920 x 1080 @ 50 Hz, 1920 x 1080 @ 60 Hz

DisplayPort 1.1a:  
640 x 480 @ 60 Hz up to 2048 x 1536 @ 60 Hz

Standard resolutions:

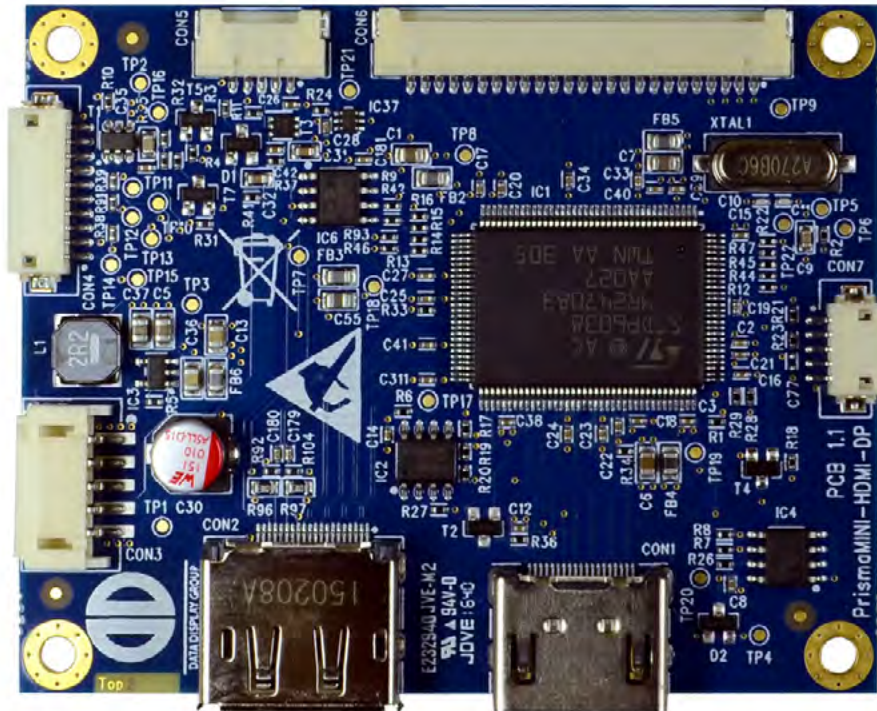
640 x 480	1366 x 768
800 x 600	1368 x 768
1024 x 768	1600 x 1200
1280 x 768	1920 x 1080
1280 x 1024	1920 x 1200
1360 x 768	





## PrismaMINI-HDMI-DP

Order No.: PR-01-430



**Industrial PrismaMINI-HDMI-DP is a small and very cost efficient custom controller concept for projects with higher volumes. We offer selected PrismaMINI standard versions but the final functions of this innovative TFT controller will be tailored to meet your own specific project requirements. Various input signals are available. Support of panels up to WUXGA 1920 x 1200 resolution with LVDS signals.**

**Applications:** Industrial, Transportation, Consumer

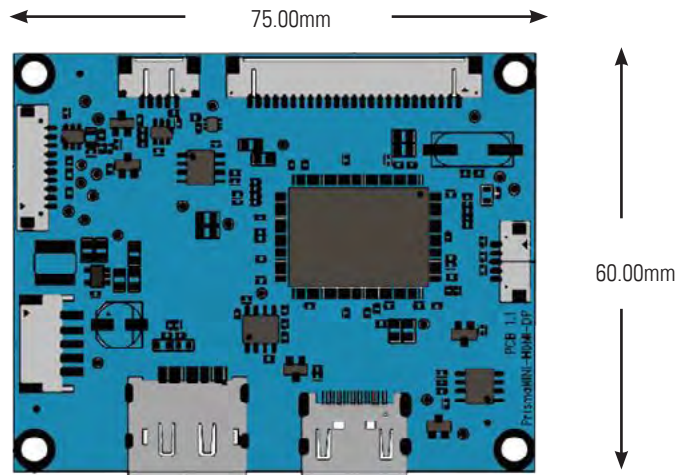
### Selectable Functions and Features:

- HDMI and DisplayPort inputs
- True High Definition 1080p on HDMI connector
- HDCP support
- PWM controlled backlight intensity
- DDC interface to control image parameter
- Vcc wide range voltage input from 3.3V to 12V
- Remote OSD via RS232
- Reference designs for fast custom implementations
- Available standard versions: PrismaMINI-HDMI and PrismaMINI-HDMI-DP (HDMI-DisplayPort)



**Accessories:**

- Inverter Cables
- LVDS Cables
- Power supplies



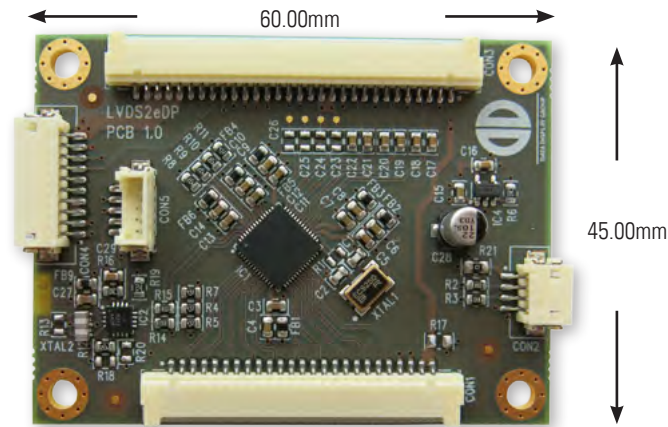
Input Signals	1 x HDMI 1 x DisplayPort
HDCP Support	Yes
Panel Signals	18/24-bit LVDS, single/dual
Panel Resolution	VGA to WUXGA (1920 x 1200)
Backlight Power Supply	12V
Power Consumption	tbd
Panel Power Support	3.3V , 5v, 12V
RS 232	Remote OSD Control
Operating Temperature	-20° to + 85°C - 4° to + 185°F
RoHS compliant	yes
Configuration Software	ChandlerRover

<p>Input Video Signal Specification:</p> <p>DVI / HDMI 1.4 Graphic: 60 Hz at WUXGA and FHD, 60 Hz or 75 Hz at other resolutions.</p> <p>HDMI Video: 720 x 480 @ 60 Hz, 720 x 576 @ 50 Hz, 1280 x 720 @ 50 Hz, 1280 x 720 @ 60 Hz, 1920 x 1080 @ 50 Hz, 1920 x 1080 @ 60 Hz</p> <p>DisplayPort 1.1a: 640 x 480 @ 60 Hz up to 2048 x 1536 @ 60 Hz</p>												
<p>Standard resolutions:</p> <table> <tr> <td>640 x 480</td> <td>1366 x 768</td> </tr> <tr> <td>800 x 600</td> <td>1368 x 768</td> </tr> <tr> <td>1024 x 768</td> <td>1600 x 1200</td> </tr> <tr> <td>1280 x 768</td> <td>1920 x 1080</td> </tr> <tr> <td>1280 x 1024</td> <td>1920 x 1200</td> </tr> <tr> <td>1360 x 768</td> <td></td> </tr> </table>	640 x 480	1366 x 768	800 x 600	1368 x 768	1024 x 768	1600 x 1200	1280 x 768	1920 x 1080	1280 x 1024	1920 x 1200	1360 x 768	
640 x 480	1366 x 768											
800 x 600	1368 x 768											
1024 x 768	1600 x 1200											
1280 x 768	1920 x 1080											
1280 x 1024	1920 x 1200											
1360 x 768												



## LVDS2eDP Adapter Board

Order No.: ZU-09-029\_A1 or ZU-09-032



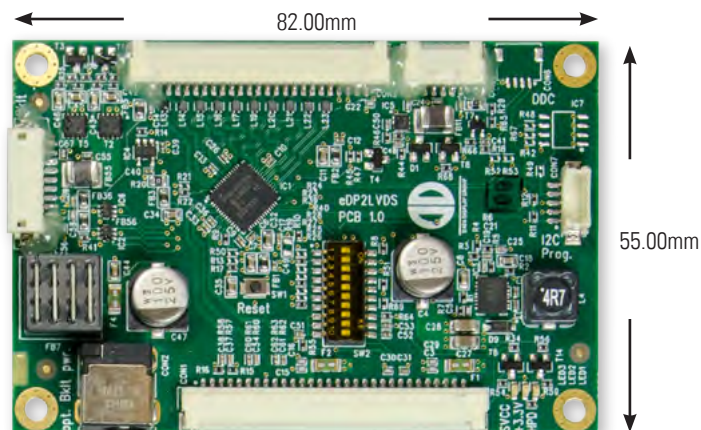
**LVDS2eDP for an easy integration of TFT displays with eDP interface**

**With the LVDS2eDP adapter board you can easily connect dual-lane eDP TFT displays with a resolution up to WUXGA (1920x1200) to a dual-LVDS interface. No single lane WXGA (1366x768).**

**Power and backlight control are looped through on the adapter.**

## eDP2LVDS Adapter Board

Order No.: ZU-09-031



**eDP2LVDS for an easy integration of industrial TFT displays to IPCs/SBCs with eDP interface**

**With the eDP2LVDS adapter board you can easily connect single or dual LVDS TFT displays with a resolution up to WUXGA (1920x1200) to a single or dual-lane eDP interface.**

**Power and backlight control are looped through on the adapter.**

Our company network supports you worldwide with offices in Germany, Great Britain, the USA and Turkey.  
For more information please contact:



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Digital Solutions for Business

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