

# Small & Medium TFT-Displays with High Resolution

- 4.8" and 5" HD
- 7.0" to 12.1" WXGA
- 9.0" to 13.3" Full-HD
- 10.1" WUXGA
- How to connect eDP to LVDS and LVDS to eDP
- Embedded





# 4.8" and 5" TFT-Displays

## HD Resolution

<b>Panel</b>	<a href="#">COM48H4N22ULC</a>	<a href="#">COM50H5N03ULC</a>	<a href="#">AM-7201280HTZQW-00H</a>
<b>Manufacturer</b>	Ortustech	Ortustech	AMPIRE
<b>Type</b>	TN / <b>4.8"</b>	TN / <b>5"</b>	TN / <b>5"</b>
<b>Viewing angle (v/h)</b>	160°/160°	160°/160°	160°/160°
<b>Resolution</b>	HD 720x1280	HD 720x1280	HD 720x1280
<b>Input</b>	MIPI*	MIPI*	MIPI*
<b>BLU/Converter integrated</b>	LED/NO	LED/NO	LED/NO
<b>Brightness (cd/m<sup>2</sup>)</b>	300	430	360
<b>Temperature operating (°C)</b>	-20...+70	-20...+70	-20...+70
<b>Special Features</b>	<b>transflective</b>	<b>transflective</b>	

\* MIPI Interface under development

All combinations with controller boards and touch sensors are possible.  
For more information contact our [sales](#).

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# 10.1" TFT-Displays

## WXGA Resolution & High Brightness

Panel	<a href="#">AA101TA12</a>	<a href="#">TM101JDHG32-00</a>	<a href="#">AL101WXL02-N</a>
Manufacturer	Mitsubishi	Tianma	AMOLED
Type	IPS	SFT	IPS
Viewing angle (v/h)	170°/170°	170°/170°	170°/170°
Resolution	WXGA 1280x800	WXGA 1280x800	WXGA 1280x800
Input	LVDS	LVDS	LVDS
BLU/Converter integrated	LED/NO*	LED/YES	LED/NO*
Brightness (cd/m²)	<b>1000</b>	<b>1000</b>	<b>1300</b>
Temperature operating (°C)	-40...+80	-20...+70	-20...+70
	<b>Touch Screen</b>		
Analog Resistive Touch Sensor	✓	✓	✓
Projected Capacitive Touch Sensor	✓	<a href="#">TM101JVHG32-00</a> with integrated PCAP and 5 touch points	✓
	<b>Industrial TFT-Controller</b>		
<a href="#">Artista-IoT/Raspberry Pi TFT Controller</a>	✓	✓	✓
<a href="#">Digital/Analog input TFT-Controller</a> (LVDS/eDP) VGA/DVI/HDMI/DisplayPort/S-Video/CVBS/Component	✓	✓	✓
Optional: active audio	✓	✓	✓

\* [SmartLED Converter](#) available

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# 12.1" TFT-Displays

WXGA Resolution

Panel	<a href="#">NL12880AC20-14D</a>	<a href="#">NL12880BC20-07F</a>
<b>Manufacturer</b>	NLT	NLT
<b>Type / size</b>	TN	TN
<b>Viewing angle (v/h)</b>	160°/160°	160°/160°
<b>Resolution</b>	WXGA 1280x800	WXGA 1280x800
<b>Input</b>	LVDS	LVDS
<b>BLU/Converter integrated</b>	LED/YES	LED/NO*
<b>Brightness (cd/m²)</b>	450	<b>1800</b>
<b>Temperature operating (°C)</b>	-30...+80	-20...+70
	<b>Touch Screen</b>	
<b>Analog Resistive Touch Sensor</b>	✓	✓
<b>Projected Capacitive Touch Sensor</b>	✓	✓
	<b>Industrial TFT-Controller</b>	
<a href="#">Artista-IoT/Raspberry Pi TFT Controller</a>	✓	✓
<a href="#">Digital/Analog input TFT-Controller</a> (LVDS/eDP) VGA/DVI/HDMI/DisplayPort/S-Video/CVBS/Component	✓	✓
<b>Optional: active audio</b>	✓	✓

\* [SmartLED Converter](#) available

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# 10" to 13.3" TFT-Displays

Full-HD Resolution

Panel	<a href="#">VVX10F087J00</a>	<a href="#">VVX12F045J00</a>	<a href="#">LP125WF-SPB2</a>	<a href="#">G133HAN01.0</a>
<b>Manufacturer</b>	Panasonic	Panasonic	LG	AUO
<b>Type</b>	IPS / <b>10.0"</b>	IPS / <b>11.6"</b>	IPS / <b>12.5"</b>	AHVA / <b>13.3"</b>
<b>Viewing angle (v/h)</b>	178°/178°	170°/170°	Min. 160°/160°	Min. 178°/178°
<b>Resolution</b>	FHD 1920x1080	FHD 1920x1080	FHD 1920x1080	FHD 1920x1080
<b>Input</b>	<b>eDP*</b>	<b>eDP*</b>	<b>eDP*</b>	LVDS
<b>BLU/Converter integrated</b>	LED/YES	LED/YES	LED/YES	LED/YES
<b>Brightness (cd/m²)</b>	300	280	400	400
<b>Temperature operating (°C)</b>	-20...+70	0...+50	0...+50	0...+70
	<i>* LVDS2eDP interface available</i>			
	<b>Touch Screen</b>			
<b>Analog Resistive Touch Sensor</b>	✓	✓	✓	✓
<b>Projected Capacitive Touch Sensor</b>	✓	✓	✓	✓
	<b>Industrial TFT-Controller</b>			
<a href="#">Artista-IoT/Raspberry Pi TFT Controller</a>	✓	✓	✓	✓
<a href="#">Digital/Analog input TFT-Controller</a> (LVDS/eDP) VGA/DVI/HDMI/DisplayPort/S-Video/CVBS/Component	✓	✓	✓	✓
<b>Optional: active audio</b>	✓	✓	✓	✓

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# 10.1" TFT-Displays

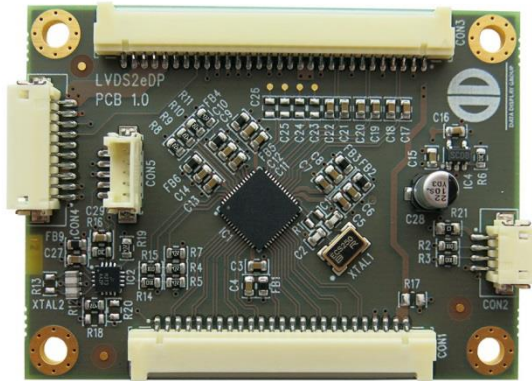
## WUXGA Resolution

<b>Panel</b>	<a href="#">AM-19201200B1TZQW-00</a>	<a href="#">AM-19201200B1TZQW-T51</a>
<b>Manufacturer</b>	Ampire	Ampire
<b>Type</b>	MVA	MVA
<b>Viewing angle (v/h)</b>	170°/170°	170°/170°
<b>Resolution</b>	WUXGA 1920x1200	WUXGA 1920x1200
<b>Input</b>	LVDS	LVDS
<b>BLU/Converter integrated</b>	LED/YES	LED/YES
<b>Brightness (cd/m²)</b>	<b>1000</b>	850
<b>Temperature operating (°C)</b>	-20...+70	-20...+70
	<b>Touch Screen</b>	
<b>Analog Resistive Touch Sensor</b>	✓	
<b>Projected Capacitive Touch Sensor</b>	✓	<b>integrated</b>
	<b>Industrial TFT-Controller</b>	
<a href="#">Artista-IoT/Raspberry Pi TFT Controller</a>	✓	✓
<a href="#">Digital/Analog input TFT-Controller</a>	✓	✓
(LVDS/eDP) VGA/DVI/HDMI/DisplayPort/S-Video/CVBS/Component	✓	✓
<b>Optional: active audio</b>	✓	✓

All combinations are possible.  
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# How to connect eDP to LVDS and LVDS to eDP



## **LVDS to eDP: LVDS2eDP adapter 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.

Operating temperature range -20 to +80°C



## **eDP to LVDS: eDP2LVDS adapter for an easy integration of 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.

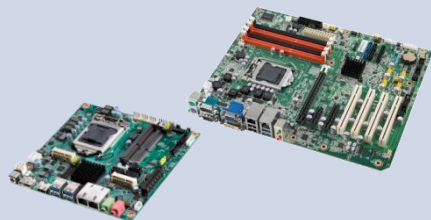
Operating temperature range -25 to +80°C

## Embedded Boards



2,5" Pico-ITX™  
3,5" Single Board Computer  
PC/104  
Slot SBC

## Industrial Mainboards



Mini-ITX™  
Micro-ATX  
Flex-ATX  
ATX

## Embedded Systems



Embedded Box PCs  
Embedded Panel PCs  
Embedded Server  
Embedded Desktop PCs  
Digital Signage Player  
Industrial Monitors

## Accessories & IoT



Gateways  
Switches  
Router  
Memory, CPUs  
Cables  
Power Supplies

### Available Features & Options:

Designed for Industrial Applications  
Extended Temperature -40°C...+85°C  
Design-in Support  
Kits (Board with OS, Display & Cables)

Long-term Availability  
Custom Design  
Fixed Bill of Material  
EOL / PCN Handling



For more information please contact:

<b>Germany</b> 	<b>Distec GmbH</b> Augsburg Str. 2b 82110 Germering Germany	Phone: +49 89 89 43 63-0 Fax: +49 89 89 43 63-131 E-Mail: <a href="mailto:info@datadisplay-group.de">info@datadisplay-group.de</a> Internet: <a href="http://www.datadisplay-group.de">www.datadisplay-group.de</a>
	<b>FORTEC Elektronik AG</b> Lechwiesenstr. 9 86899 Landsberg am Lech Germany	Phone: +49 8191 911 72-0 Fax: +49 8191 217 70 E-Mail: <a href="mailto:sales@fortecag.de">sales@fortecag.de</a> Internet: <a href="http://www.fortecag.de">www.fortecag.de</a>
	<b>FORTEC Elektronik AG Office West</b> Hohenstaufenring 55 50674 Köln Germany	Phone: +49 221 272 273-0 Fax: +49 221 272 273-10 E-Mail: <a href="mailto:west@fortecag.de">west@fortecag.de</a>
<b>Austria</b> 	<b>FORTEC Elektronik AG Office Vienna</b> Nuschinggasse 12 1230 Wien Austria	Phone: +43 1 8673492-0 Fax: +43 1 8673492-26 E-Mail: <a href="mailto:office@fortec.at">office@fortec.at</a>
<b>Switzerland</b> 	<b>ALTRAC AG</b> Bahnhofstraße 3 5436 Würenlos Switzerland	Phone: +41 44 7446111 Telefax: +41 44 7446161 E-Mail: <a href="mailto:info@altrac.ch">info@altrac.ch</a> Internet: <a href="http://www.altrac.ch">www.altrac.ch</a>
<b>United Kingdom</b> 	<b>Display Technology Ltd.</b> 5 The Oaks Business Village Revenge Road, Lordswood Chatham, Kent, ME5 8LF United Kingdom	Phone: +44 1634 67 27 55 Fax: +44 1634 67 27 54 E-Mail: <a href="mailto:info@displaytechnology.co.uk">info@displaytechnology.co.uk</a> Internet: <a href="http://www.displaytechnology.co.uk">www.displaytechnology.co.uk</a>
<b>USA</b> 	<b>Apollo Display Technologies, Corp.</b> 87 Raynor Avenue, Unit 1 Ronkonkoma, NY 11779 United States of America	Phone: +1 631 580-43 60 Fax: +1 631 580-43 70 E-Mail: <a href="mailto:info@apolloDisplays.com">info@apolloDisplays.com</a> Internet: <a href="http://www.apolloDisplays.com">www.apolloDisplays.com</a>