

# **Crystal Display Systems Limited**

www.crystal-display.com

# **Product and Services Overview for**

\* Industrial & Commercial \* Retail & Digital Signage

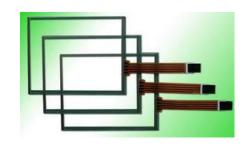












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In this Crystal Displays 2014 overview we give you an excellent overview of our products and services in the following sections:

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### Who is Crystal Displays and what do we do?





- ➤ Crystal Displays is a leading U.K. Designer, and Value Added Reseller, and Distributor of Flat panel display solutions with global customers and partners.
- Crystal Displays offers Industrial, Retail and Digital Signage products as well as related products and services including stockholding and call off / Kan Ban options.



- Additional capabilities/services include but are not limited to:
  - Design consultation
  - Demo /Sample program
  - Customised Display kits
  - Complete after sales service
  - Repair services
  - Extended warranty program
  - Optical bonding services
  - Touch screen integration
  - Hibrite solutions
  - Widest range of transparent Display kits and showcases
  - Full range of Retail Displays





### **Manufacturers and Suppliers**





























#### **Touchscreens**













#### **Interface solutions & others**









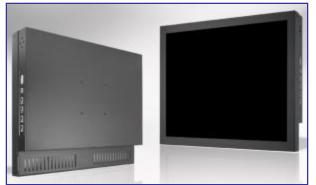
"We are constantly adding products to our range and can supply other brands

upon request so please contact our team."

### **Industrial, Commercial, and Retail Monitors**



Crystal Displays offers a full range of standard and custom monitor products top meet your needs and requirements. Contact us about your project now.



**Chassis and rear Mount** 



Waterproof sealed



**Sunlight readable** 



Professional large format monitors



**Industrial super slim SMART monitors** 



**Rackmount** 



# **Touchscreen Technologies**



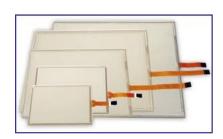
<u>Analog resistive Touch Screens</u> are especially suitable for cost sensitive, compact applications. 4 and 5 wire available.

Capacitive Touch Screens are resistant and suitable for outdoor and publicly accessible applications.

<u>IR Infrared and SAW (Surface Acoustic Wave)</u> technologies especially for hazardous environments, and IR for large sizes or applications without glass. IR and SAW Multi Touch products available.

<u>Touch Controllers</u> are connecting the Touch Screens with an RS232 or USB interface over which they are connected to a computer. The touch sensitivity and other features can be set with the driver software. Multi touch capability.

<u>Projected Capacitive</u> for ruggedised and specific multi touch applications. PCAP for stylish multi touch applications.









### Full range of interface card solutions



This excellent range of industrial interface offer high quality / high reliability solutions with all inputs required (see below) driving displays up to 4K (3840 x 2160). These are offered as stand alone boards, kits solutions with cables / connectors etc.. or as fully tested kit solutions including the TFT panel and / or touchscreens









<b>Product Name</b>	<b>PCB Dimension</b>	<u>Inputs</u>	<u>Outputs</u>	<b>Max Resolution</b>	<u>Datasheet</u>
PI Series	100x150x16mm	RGB, DP, HDMI, Y/ Pb/Pr, PC Sound	LVDS, Speaker	1920 x 1080	<u>Download</u>
PO Series	96x96x15mm	RGB, DVI	LVDS, TTL	1920 x 1080	<u>Download</u>
PS Series	100x120x7.2mm	RGB, DVI, DP, HD MI, External I2C	LVDS, Audio	1920 x 1080	Download
C Series	110x150x17mm	RGB, DVI, CVBS, SVHS, Y/Pb/Pr, 10 w Audio	LVDS	1920 x 1080	Download
O Series	100x150x16mm	RGB, DVI 2w Audio	LVDS	1920 x 1080	Download

Other options available upon request

#### "Ultra-Wide stretched displays Including interactive touch"



Our range of stretched monitors, also known as BAR-Type displays offer an ultra wide aspect ratio is perfect for grabbing your audiences attention, and the high brightness display gives perfect visual performance in a wide variety of applications.

Having been used in a wide variety of applications including Bars, Casino's and elevators. Assembled with full industrial grade components to ensure the highest standards of reliability.









#### **Android Retail Tablets**

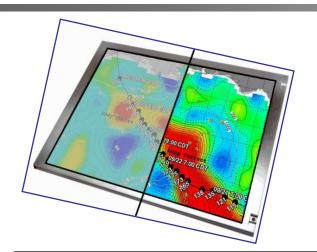
Android based interactive touch tablets have been specifically designed and built for commercial and retail use.

Available in sizes 10" up to 21.5"



## **Value Add Services - Optical Enhancements**





This can be achieved through Anti-Reflection Enhancement Film, AR glass top layer or full optically bonded display. This currently available up to 46" but please ask for latest information – for more information please email: info@crystal-display.com

#### Some of the benefits of optical bonding

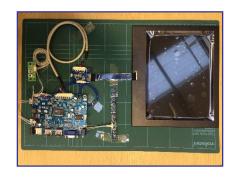
- ✓ Increased ruggedness: Bonding a sheet of glass on top of the display increases the ruggedness of the display.
- ✓ Optimum visuals in bright ambient light
- ✓ Improved durability: A bonded display is better able to resist scratches, fluids, stains and dirt.
- ✓ Condensation: The elimination of an air gap between the cover glass and the display means that moisture cannot penetrate and cause fogging on display's surface.
- ✓ Extended temperature range and EMI filtering: The temperature range of the display can be extended by incorporating ITO heaters on the cover glass; EMI filters can be added via the same mechanism.





### **Transparent Display Kits & Showcases**





Transparent Display kits from 5" up to 84" for integrators and designers



#### Various Transparent showcases including customised sizes and designs













Innovative transparent (translucent) Displays panels and showcases

### **Retail / Digital Signage Products**





**Battery Powered Displays** 





Digital multi Display shelf edge solutions



Advertising Displays and totem kiosks

Wide range of excellent Media Players



Wide range of digital adverting displays with built in Media players and / or PC



Videowall and tiling solutions

### Some of Crystal Displays other products





Digital Transparent Display Fridge for Advertising and promotions



**Outdoor IP6x Display solutions** 





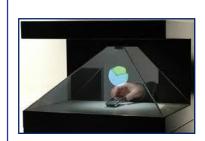
**Small slim TFTs for mobile applications** 



**Power supplies** 



**Touch screen monitors** 



**Holographic Displays** 



### **Embedded Single Board Computers**





Industry Leader in Embedded Computing

CDS have a wide array of embedded SBC solutions designed for use in professional applications. Using an SBC offers several key advantages:

- Complete solution hardware, software, OS and all other required functionality.
- LVDS output allows to direct drive the TFT panel for optimum visual quality.
- Easier to integrate eliminating the need for a separate PC, controller card and cabling saving time and money.
- Can be used to control external devices and offer more functionality
- Fully customizable to suit your application in terms of size and performance.



<u>The Mini ITX</u> is one of the most popular motherboards in use today. It offers the same functionality as the full size ATX board but scaled down to a much smaller footprint, measuring 170 x 170mm. **Mini ITX board here** 



The 3.5" SBC is currently the most popular SBC in use today.

It has all of the popular features and functionality but with a very small footprint, measuring only 146 x 102mm. They offer a single voltage input so do not require an ATX PSU and can be fully customized to suit your application. We also offer a broad range of processors with the Atom based processors for majority of applications right up to the intel i7 processors for more demanding applications. **3.5" SBCs here** 

# **Panel PCs**



We specialize in Panel PCs and have a vast range of options now available. We can supply our solutions in many different formats to suit your application.

Our sizes start as small as 6.5" diagonal, right up to 65". We test all our panel PC's for each application for optimum performance and visual quality.

When choosing a Panel PC, you need to consider several elements including:

- ✓ The Display (Diagonal Size, Resolution, Brightness, Backlight etc..)
- ✓ The Format ( Open Frame, Chassis Mount, Rack Mount, IP66 Sealed etc.) Touchscreen Required? Technology? (Resistive, Capacitive, IR, SAW etc.)
- ✓ The PC itself (Processing Power, Graphic Power, I/O, HDD etc..) Operating System Preinstalled? (Windows 7, Windows 7 embedded etc.)

#### Open Frame Panel PC



Panel PC that can fit for customized cabinet.

#### Chassis Panel PC



A panel PC with complete chassis.

#### Chassis Mount Panel PC



Chassis type Panel PC with flange for eav installation.

#### Panel Mount Panel PC



Easy Installation Panel Mount Design

#### Rack Mount Panel PC



Panel PC fit for 19" Rack Mount.

#### IP65 Front Panel PC



IP65 front side Panel PC can resist dust and water

#### Full IP66 Panel PC



Panel PC for outdoor applications.

#### Panel PC with PCI slot



Panel PC with PCI slot for more flexibility.

### **Examples of Crystal Display applications**



- Industrial / Aviation / Military Segment
- Medical Segment
- Automotive / Marine / Industrial Segment
- Retail / Digital Signage segment
- Gaming market
- EPOS
- Instrumentation
- Advertising
- Multi touch
- Specialist / Custom
- + Others ....

























### **Examples of Crystal Display clients**





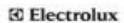












































Anyone can supply product but we offer a full personal consultation, design & installation service, where required, backed up by the experience of many designs and projects so YOU receive the best solution for YOUR project.





For more information please contact our main office and technical sales support team

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www.crystal-display.com

"Thank You for your time and have a great 2014 from the CDS team"