



Sigma Series Touch Display Solution

The AMT Sigma series is an integrated touch display solution (TDS) designed to simplify your development process and provide scalable solutions. It is designed to meet the needs of various environments, including outdoor, semi-outdoor, industrial, medical, public commercial, kiosk...etc. The integration includes:

- Various sizes of LCD panel with PCAP touch panel
- TDS meet the demands of various harsh environments and provide an intuitive interface for human-machine interaction.
- Sigma series TDS has two LCD brightness, 500 nits/ 1000 nits, air bonding or optical bonding to touch panel
- Sigma series TDS comes with pre-tested CE and UL certifications. The Sigma TDS aims to reduce your hardware design effort, shorten your development time, and simplify your interface cables into one common cable for all sizes.

Sigma TDS Features

1. Integrated LVDS, touch panel, LED driver control signals into a single 51-PIN connector
2. Wide operation & storage temperature range for industrial, medical and high specification requirement applications.
3. LCD brightness: 500 nits or 1000 nits available.
4. Two LCD+Touch integration options: tape bonding or optical bonding
5. Highly integrated with high-brightness backlight, longer lifetime, and LED driver with PWM control.
6. Software OSD available.
7. Longevity



Front View



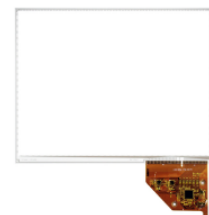
Rear View



AD Board

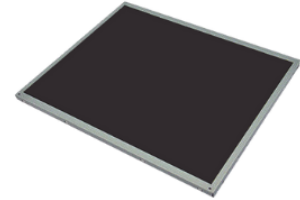
Sigma Touch Sensor Features

1. Sigma touch sensors made by AMT with an operating temperature range of -40°C to +85°C.
2. All Sigma TDS equipped with in-house anti-UV treatment to meet ASTM G154-Cycle 1 1000hr standards.
3. The touch panel of All Sigma TDS uses chemically strengthened cover glass.
4. PenMount utility is a User-friendly and Easy-to-use Utility for quick system tuning.
5. Features advanced firmware for operation with thick glass, thick gloves, and water detection.
6. Decor glass can be customized according to customer needs.
7. Design standard with ESD and EMC protection to meet IEC 61000.
8. AMT is known for high-quality and reliable touch panels for more than 20 years.



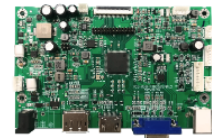
Sigma LCD Features

1. Different sizes of LCD available
2. Built-in panel driver and backlight driver with PWM for dimming.
3. Standard 1000 nits High brightness LCD for outdoor with 500 nits option for the same housing.
4. Longer LED lifetime with 50,000 or 70,000 hours.
5. The operating temperatures of the LCD are all industrial high specifications.
6. Full view viewing angle with IPS technology.
7. The output has two interfaces: LVDS and eDP.



AD Board Features

1. AD104 AD Board is a highly-integrated for digital panel solution
2. AD104 build-in LVDS, VGA, DP, and HDMI interface, DC 12V~24V input
3. LED driving included
4. Meet ESD Level 4 Criteria A & EMI Class B (FCC)
5. Meet RoHS/REACH



Sigma TDS Specifications

| Item | Specification | | | | |
|----------------------------------|---|----------|-------|-----------|-------|
| Screen Size | 7" | 10.1" | 12.1" | 15.6" | 21.5" |
| Display Resolution | 1024x600 | 1280x800 | | 1920x1080 | |
| Display Mode | IPS , Normally Black | | | | |
| Luminance (nits) | 500 / 1000 (Typ.) | | | | |
| Contrast Ratio | 1000:1 (Typ.) | | | | |
| Display Color | 16.7M | | | | |
| Viewing Direction | Full View | | | | |
| LCD Interface | LVDS | | | | |
| Touch Interface | USB, I ² C | | | USB | |
| Cover glass | Clear surface, Black printing | | | | |
| UV protection | ASTM G154-Cycle 1 500hr | | | | |
| UL & CE | UL listed & CE Pre-Compliance | | | | |
| AD104 AD Board (Optional) | | | | | |
| Input Signal | VGA, HDMI, DP, STEREO AUDIO (PC AUDIO) | | | | |
| Support Mode | VGA, SVGA, XGA, SXGA, UXGA, HD, Full HD | | | | |
| Output Signal | Dual channels LVDS | | | | |
| Dimension (mm) | 135 x 85 x 20 | | | | |
| Temperature | -20°C ~ 70°C (Working) / -40°C ~ 80°C (Storage) | | | | |

* Specifications subject to change without prior notice

Why Choose AMT Sigma TDS?

1. Integrating Sigma series TDS with one common connector for all sizes makes it easy for customers to design and purchase accessories and materials, and simplify the company's inventory. They have reduced hardware and firmware design efforts for integration into the customer's system.
2. Pre-compliance with CE and UL certifications to save time for the product certification process.
3. All products meet industrial specifications for harsh environments. Higher operating temp and storage temp
4. AMT made touch panel and controller, with user-friendly utility support
5. TDS product is designed with an Anti-UV feature, surface glass is chemically strengthened glass
6. TDS has a longer LED lifetime for better system durability.
7. Various sizes are available in Sigma TDS family, each product can change the touch décor glass by request.
8. Long time support
9. Provides scalable solution and easy firmware integration to connect to AD Board or SBC.
10. Soft OSD is available as an optional item to support.

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