

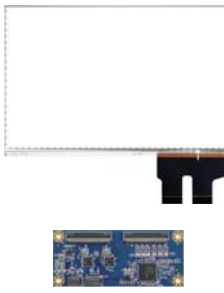
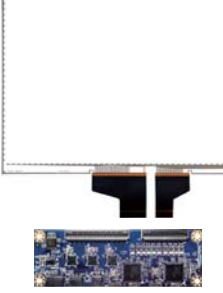

High Performance Touch Solutions

THE CLEAR LEADER

In order to address client application environments that are prone to noise or other sources of interference, the PenMount PM1310, PM1410 and PM1710 can meet EMC Level III certification. Testing was performed according to the following standards:

- IEC61000-4-3 Level III (Radiated Susceptibility test, Passed 10V/m)
- IEC61000-4-6 Level III (Conducted Susceptibility test, Passed 10Vrms)

The PenMount PM1310, PM1410 and PM1710 utilizes a comprehensive hardware design paired with firmware to effectively reduce the probability of noise interference and allow significant enhancement in the controller's anti-noise ability.

	8" ~ 10.9"	12.1" ~ 15.6"	17" ~ 24"
Sensor + Control Board	 PM1310	 PM1410	 PM1710
Touch Controller	PenMount P2-08	PenMount P2-08 x 2	PenMount P2-08 x 2
Board Size (L x W x H,mm)	30 x 70 x 3	30 x 90 x 3	30 x 125 x 3
Tail Terminator	two 40-pins+40-pins	two 60-pins+40-pins	two 80-pins+50-pins
Interface Connectors	USB, UART, I ² C	USB, I ² C, UART, RS-232	USB, RS-232
Maximum Touch Lines	23 sensing lines 35 driving lines	38 sensing lines 57 driving lines	76 sensing lines 44 driving lines
Power Consumption	Working : 33.2 mA Sleep : 1.0 mA	Working : 60.3 mA Sleep : 3.0 mA	Working : 58 mA Sleep : 1.9 mA
Sample Rate (Single) *	> 160 sps	> 160 sps	> 160 sps

AMT Projected Capacitive Input Specifications :

- Sensor Size : 3.5"~24"
- Surface Hardness : Mohs 5 for clear surface glass
- Cover Lens : Glass
- Cover Lens Thickness : 1.1/ 1.8/ 2.8mm (contact AMT for details)
- Light Transmission : 87% ± 3% for GFFF structure
90% ± 3% for GFF structure
- Haze : < 3% based on clear surface for GFFF structure
< 3% or 7 ± 3% based on clear surface for GFF structure
- Tail Design : FPC or COF tail
- Input Media : Finger, and gloved hand (contact AMT for details)
- Activation Force : Forceless
- ADC Resolution : 10 bits

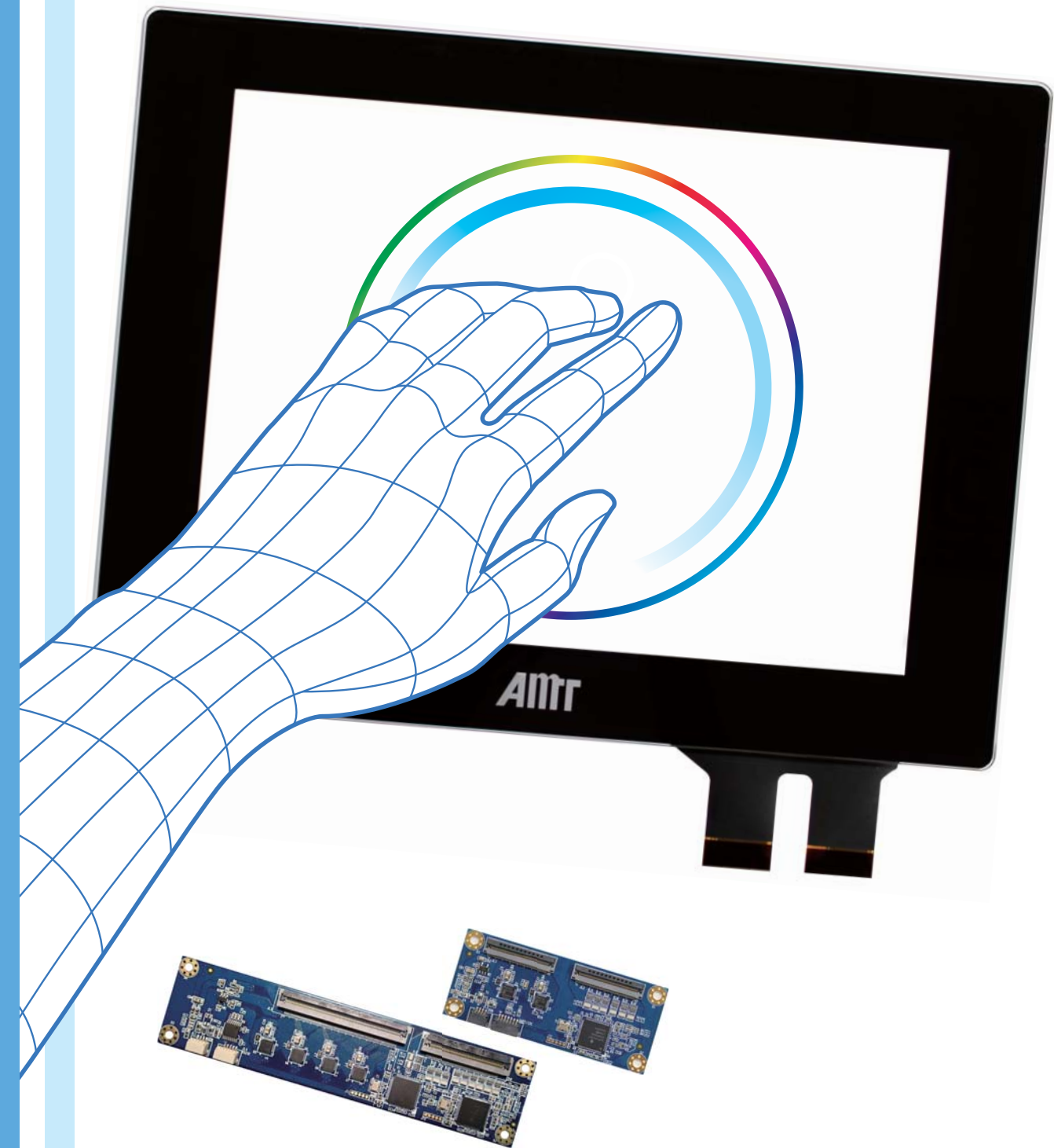
PenMount Control Board Specifications :

- Storage Temperature : -40°C ~ +85°C
- Operating Temperature : -20°C ~ +70°C or -30°C ~ +70°C
- Operating Voltage : +5V
- Drivers : Windows 7, 8, Vista, XP, CE
Linux : Android, others by request
- Firmware : Develop by PenMount team

Surface Chemical Resistance : for cover glass

- Industrial Chemicals : Acetone, Alcohol, 5% Ammonia, Antifreeze, Coal Oil, Diesel Fuel, Hexane, 6% Hydrochloric Acid, 3% Hydrogen Peroxide, Isopropanol, Methylene Chloride, Methyl Ethyl Ketone(MEK), Mineral Spirit, Motor Oil, 70% Nitric Acid, 10% Sodium Hydroxide, 40% Sulfuric Acid, Toluene, Transmission Fluid, Turpentine, Unleaded Gasoline.
- Household Products : Ammonia-based Glass Cleaner, Cleaner, Coffee, Cola, Cooking Oil, Grease, Laundry Detergents, Salt, Vinegar.

* Above features subject to change without prior notice.



Projected Capacitive Touch Solutions
Touch Panels, PenMount Control Boards and Drivers

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AMT PCI Touch Panel & PenMount Control Board




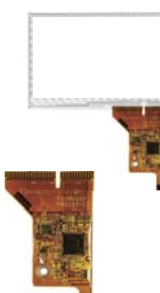


An industry-leading total touch solutions provider, AMT has been committed to the development of high-performance Resistive and Projected Capacitive touch solutions for over 16 years. As demand for Projected Capacitive Input (PCI) touchscreens grows, AMT continues to expand our product range. Currently the size of our PCI touchscreens range from 3.5" to 24". AMT PCI touchscreens are available in GFFF (Glass-Film-Film) and GFF (Glass-Film-Film) structures. We also offer PCI sensors without top cover glass for VAR customers who wish to laminate the cover glass locally.





AMT PCI touch panels are supported by PenMount controllers, utilities, and remote firmware update services. PenMount controllers for PCI touchscreens support multiple platforms and interfaces (USB, RS232...etc.), and enable features such as EMC shielding, multi-touch, thick cover glass, gloved touch, water or normal saline detection...etc. For customers who require enhanced EMC protection, PenMount PCI controllers meet the requirements of EN61000-4-3(RS) and EN61000-4-6(CS) 3V/m or 10V/m testing environments.

Currently, AMT offers the product lines highlighted below:

- 3" to 4.9" touch panels coupled with PenMount PM2101 / PM2103 COF
- 5" to 7.9" touch panels coupled with PenMount PM2201 COF
- 8" to 10.9" touch panels coupled with PenMount PM2300 COF
- 5" to 7.9" touch panels coupled with PenMount PM1201A
- 8" to 10.9" touch panels coupled with PenMount PM1302 / PM1310
- 11" to 15" touch panels coupled with PM1401
- 12.1" to 15.6" touch panels coupled with PM1410
- 15.6" touch panels coupled with PM1500
- 17" to 24" touch panels coupled with PM1710




















With comprehensive support and services, AMT strives to provide customers the benefits of total solutions and the ease of a smoothly integrated user experience. Development of more advanced features is underway as AMT continues our mission to provide quality touch solutions.

	3" ~ 4.9"	3" ~ 4.9"	5" ~ 7.9"	8" ~ 10.9"
PCI COF	 PM2101	 PM2103	 PM2201	 PM2300
Touch Controller	PenMount P2-02	PenMount P2-06	PenMount P2-03	PenMount P2-06
COF Tail Size (L x W,mm)	57.6 x 38.5	64.1 x 38.5	72.6 x 51.5	70.5 x 82.6
Tail Terminator	10-pins	10-pins	10-pins	10-pins
Interface	UART, I ² C	USB, UART, I ² C	USB, UART, I ² C	USB, UART, I ² C
Maximum Touch Lines	10 sensing lines 17 driving lines	10 sensing lines 17 driving lines	15 sensing lines 24 driving lines	24 sensing lines 35 driving lines
Power Consumption	Working : 8.8 mA Sleep : 0.2 mA	Working : 41.7 mA Sleep : 2.5 mA	Working : 28.8 mA Sleep : 1.4 mA	Working : 45.8 mA Sleep : 2.5 mA
Sample Rate (Single) *	> 100 sps	> 150 sps	> 100 sps	> 150 sps

	5" ~ 7.9"	8" ~ 10.9"	11" ~ 15"	15.6"
Panel + Control Board	 PM1201A	 PM1302	 PM1401	 PM1500
Touch Controller	PenMount P2-03	PenMount P2-04	PenMount P2-02 PenMount P2-04	PenMount P2-04 x 1 PenMount P2-02 x 2
Board Size (L x W x H,mm)	30 x 80 x 3.9	40 x 70 x 3	30 x 125 x 3	30 x 125 x 4
Tail Terminator	two 20-pins+30-pins	two 40-pins+40-pins	three 30-pins+30-pins+40-pins	three 40-pins+40-pins+40-pins
Interface Connectors	USB, RS-232	USB, RS-232, UART	USB, RS-232, UART	USB, RS-232
Maximum Touch Lines	15 sensing lines 24 driving lines	23 sensing lines 30 driving lines	35 sensing lines 46 driving lines	66 sensing lines 46 driving lines
Power Consumption	Working : 37 mA Sleep : 3.75 mA	Working : 31.3 mA Sleep : 5 mA	Working : 41.6 mA Sleep : 5.3 mA	Working : 61 mA Sleep : 4.2 mA
Sample Rate (Single) *	> 100 sps	> 100 sps	> 100 sps	> 100 sps

The Full Range of AMT PCI Touch Panels & PenMount PCI Controllers

Part number definition: **P30nn-xyz** **x:** 0 means G-F-F-F, A means G-F-F, C means COF tail **z:** version number
y: 2 means plain top glass, G means décor glass **nn:** serial number

Touch Panel																			
Size	3.5"	4.3"w	5.7"	6.5"	7"w	10.1"w	10.4"	7"w	10.1"w	8.4"	10.4"	12.1"	12.1"w	15"	12.1"	15.6"w	18.5"w	21.5"w	24"w
G-F-F Part No.	P3001-C20	P3015-C20	P3010-C20	P3011-C20	P3012-C2A P3012-CGA	P3021-C2A	P3024-C20	N/A	P3021-A2A	P3007-A2A	P3008-A2A P3008-AGA	P3009-A2A P3009-AGA	P3014-A20	P3013-A2A P3013-AGA	P3026-A20	P3016-A20	P3019-A20	P3022-A20	P3025-A20
G-F-F-F Part No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	P3012-02A	N/A	P3007-02A	P3008-02A P3008-0GA	P3009-02A P3009-0GA	P3014-020	P3013-02A	N/A	P3016-020 P3016-0G0	N/A	N/A	N/A
PenMount Part No.	PM2101 COF		PM2201 COF			PM2300 COF		PM1201A	PM1310	PM1310 PM1302		PM1401		PM1410	PM1500	PM1710			

* Note: Sample rate/second varies based on different firmware versions and touch panels.