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FOR IMMEDIATE RELEASE   No. 2806

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Mitsubishi Electric to Add Two Touch Panels
to Lineup of Color TFT-LCD Modules

TOKYO, December 3, 2013 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today the launch of 8.4-inch XGA and 10.4-inch SVGA color TFT-LCD modules with projected capacitive touch panels offering excellent visual clarity and durable cover glass. Sales will begin on December 3 through Mitsubishi Electric offices worldwide (www.MitsubishiElectric.com/semiconductors/). Initial production has been set at 2,000 units per month for each new model.

The two modules will expand the options in Mitsubishi Electric's color TFT-LCD module lineup of high-quality touch-panel screens to 12, available in sizes from 6.5 to 19.0 inches.

AA084XE11-PCAP   AA104SL12-PCAP

__Widely applicable and highly reliable touch-panel solutions__

- TFT-LCD, PCAP touch panel, touch controller and driver software in 8.4" and 10.4" versions for factory automation, medical equipment and measuring instrumentation.
- Factory-installed TFT-LCD, PCAP touch panel, cover glass and touch controller achieve excellent reliability.
- Options for diverse operability, such as optical bonding (resin bonding between TFT-LCD module, touch-panel sensor and cover glass) for clear images in bright environments, tempered cover glass and anti-reflection/anti-smudge surface treatments.

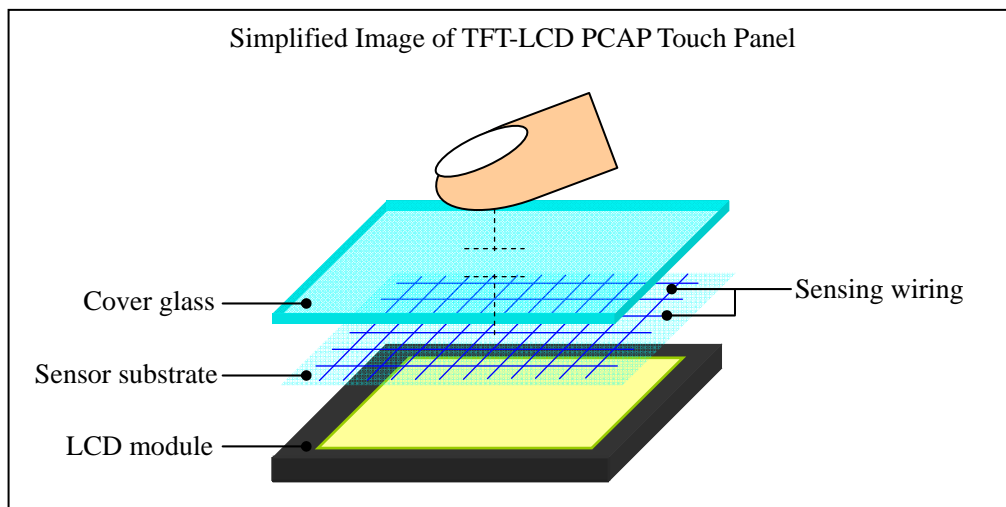*Excellent visual clarity combined with tactile operation via cover glass*

- Proprietary detective processing for smooth, accurate response to finger movements, even when gloved.

- Ultra-thin, highly conductive sensor lines with proprietary TFT array technologies for excellent clarity.

Color TFT-LCD modules with projected capacitive touch panel (new models in bold)

Display Size		Resolution	Model
4:3	6.5-inch	VGA	AA065VE11-PCAP
	8.4-inch	SVGA	AA084SD11-PCAP
	8.4-inch	**XGA**	**AA084XE11-PCAP**
	10.4-inch	**SVGA**	**AA104SL12-PCAP**
	10.4-inch	XGA	AA104XF12-PCAP
	12.1-inch	XGA	AA121XN11-PCAP
	15.0-inch	XGA	AA150XT11-PCAP
5:4	19.0-inch	SXGA	AA190EA01-PCAP
Wide	7.0-inch	WVGA	AA070ME11-PCAP
	9.0-inch	WXGA	AA090TB01-PCAP
	10.6-inch	WXGA	AA106TA01-PCAP
	12.1-inch	WXGA	AA121TD11-PCAP

Projected Capacitive Touch (PCAP)

Capacitive touch is a touchscreen technology that uses two perpendicular layers of conductive material to form a grid. A uniform electrostatic field is created when current is applied. The touch of a finger or other conductive object distorts the field, allowing the system to track movement across the screen accurately at each intersection on the grid. The technology is used commonly for smartphones and tablets.

Simplified Image of TFT-LCD PCAP Touch Panel

Cover glass

Sensor substrate

LCD module

Sensing wiring

Specifications

Model		AA084XE11-PCAP	AA104SL12-PCAP
Display size/resolution		21.3cm (8.4 inch) XGA	26cm (10.4 inch) SVGA
Display area (mm)		170.496 (H) × 127.872 (V)	211.2 (H) × 158.4 (V)
Number of dots		1024 (H) × 768 (V)	800 (H) × 600 (V)
Pixel pitch (mm)		0.1665 (H) × 0.1665 (V)	0.264 (H) × 0.264 (V)
Contrast ratio		600:1	700:1
Luminance (cd/m^2)		(800)	(960)
Viewing angle (CR>10)(°)		(-80 to +80) (H) (-60 to +80) (V)	-80 to +80 (H) -60 to +80 (V)
Colors		262k (6 bits/color), 16.7M (8 bits/color)	262k (6 bits/color), 16.7M (8 bits/color)
Electrical interface		LVDS 6/8 bits	LVDS 6/8 bits
Size (mm)	W	209.5 (LCD: 199.5)	240.6 (LCD: 230.0)
	H	159.0 (LCD: 149.0)	190.8 (LCD: 180.2)
	D	14.4(LCD: 9.7) (1.1 mm cover glass thickness)	15.0(LCD:9.5) (1.8 mm cover glass thickness)
Operational temperatures (°C)		-30 to +70	-30 to +70
Storage temperatures (°C)		-30 to +80	-30 to +80
Glass thickness (mm)		Up to 2.8mm (thicker specimens available upon request)	
Black mask printing		Available	
Strengthening treatment		Available	
Low-reflection treatment		Available	
Anti-smudge treatment		Available	
Optical bonding		Available	
Controller interface		UART, USB	
Operating systems[*]		Windows 7 and Linux 3.0	

*Please contact a Mitsubishi Electric sales representative regarding support for other operating systems.

Environmental awareness

The color TFT-LCD modules are fully compliant with the European restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), and are completely mercury-free.

About Mitsubishi Electric Corporation

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 3,567.1 billion yen (US$ 37.9 billion*) in the fiscal year ended March 31, 2013. For more information visit http://www.MitsubishiElectric.com

*At an exchange rate of 94 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2013

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