



touching tomorrow, today

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Control Board Product Specification

對象客戶 Customer	
產品簡述 Product Description	18.5 INCH PROJECTED CAPACITIVE TOUCH PANEL CONTROL BOARD
規格書適用級別 Application Level	<input type="checkbox"/> Preliminary Reference Only. <input type="checkbox"/> Sample Used Only. <input checked="" type="checkbox"/> Mass-Production Used.
申請日期 Apply Date	2013-04-29
規格書版次別 Spec. Version	3.0
產品型號 Part Number	MT9C18508EU01
韌體版本 F/W version	V1.04
客戶確認 Approved By Customer	
客戶料號 Customer Part No.	
審核人員 Checked By	
核准人員 Approved By	

核准窗口 Approved By	審核窗口 Checked By	制定窗口 Prepared By
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修正履歷

REVISION HISTORY

項次 Item	版次 Version	修正日期 Date	摘要敘述 Description	頁數 Page
1	1.0	2011-10-21	1. Initial Release.	08
2	2.0	2013-02-05	1. Modify F/W version	01
3	3.0	2013-04-29	1. Updated logo.	1~8

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1. 一般說明 GENERAL DESCRIPTION

1.1 產品摘要 OVERVIEW

這是一款被設計應用於投射式電容觸控面板的控制器，透過玻璃的接觸感應來滿足全平面需求的產品；在 WINDOWS 7 作業平台支援下，控制器可驅動觸控面板達到兩指的觸控功能。

It is designed for Projected Capacitive Touch Panel (PCAP) application; through glass touch sensing is ready for products that require a complete flat surface. It also can drive the touch panel to get tow fingers touch function that based on the Windows 7 support.

1.2 產品優點 BENEFITS

- 高準確度並且不必較正。
Excellent accuracy support and Non-calibration.
- 極高靈敏度並且觸控點擊力度小。
Higher sensitivity and light touch force.
- 系統重啟模式可支援韌體更新作業。
Boot loaded support Firmware update.

1.3 產品特徵 FEATURES

項次 ITEMS	規格 SPECIFICATIONS
連接器介面 Interface (Host/Master)	USB Standard 1.1 Full Speed Compliant
作業條件 Operation Conditions	-10°C ~ +60°C at Min 20% to Max 90% RH
儲存條件 Storage Conditions	-15°C ~ +65°C at Min 10% to Max 90% RH
控制器外觀尺寸 Control Board Dimensions	L_84 mm * W_53 mm * H_6.6mm ± 0.5 mm

備註 1：為確保觸控模組可有效發揮其功能，請務必於作業時將控制器作有效的接地動作。

Note 2：In order to make a touch panel operate normally, please make sure that the host device is grounded.

備註 2：假設觸控模組沒有被有效的執行接地動作時，觸控面板可能會有功能性受損或不穩定等現象發生。

Note 2：The touch panel may be damaged functionally or unstable if the panel does not be grounded through your system to earth.

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2. 控制器規格 CONTROL BOARD SPECIFICATION

2.1 電氣特性 ELECTRICAL CHARACTERISTICS

項次 ITEMS	規格 SPECIFICATIONS	備註 NOTE
連接器介面 Interface (Host/Master)	USB	Standard 1.1 Full Speed Compliant
電源供給 Power Supply	5V	DC
功率消耗 Power Consumption	40mA (Typical)	60mA (Max.)
報點率 Report rate	120Hz (Dual Points)	50Hz(min) that definition by Windows 7

備註 1：USB 為本控制器標準連接器介面，針對其他連接器介面需求仍可採以客製化，諸如 I2C 或 RS-232 連接器介面。

Note1：USB interface is for standard application, but for other application could be optional such as the I2C or RS232 interfaces.

備註 2：為確保觸控模組可有效發揮其功能，電源供應器必須符合 IEC 62684 規範。

Note2：In order to make a touch panel operate normally, power supply or power adapter have to conform to IEC 62684.

2.2 連接器腳位定義 PIN ASSIGNMENT

腳位 PIN #	符號 SYMBOL	型式 TYPE	說明 DESCRIPTION
1	EGND		Earth Ground
2	VCC	Power	Supply Voltage
3	GND	Power	Ground Connection
4	D+	Signal	USB Signal
5	D-	Signal	USB Signal

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2.3 適用之作業系統 OS COMPLIABLE

系統分類 PLATFORM CLASSIFICATION		觸控點數		USB 驅動程式		座標校正 CALIBRATION	備註 NOTE
		TOUCH POINTS		USB DRIVER			
		SINGLE	DULE	SINGLE TOUCH	MULTI-TOUCH		
Windows Series	Windows 7	V	V	Non-Driver	Non-Driver	Non-Calibration	
	Windows Vista	V		Non-Driver	Non-Support	Non-Calibration	
	Windows XP	V		Non-Driver	Non-Support	Non-Calibration	
	Windows 2000	V		Non-Driver	Non-Support	Non-Calibration	
	Windows ME	V		Non-Driver	Non-Support	Non-Calibration	
	Windows 98	V		Non-Driver	Non-Support	Non-Calibration	
Linux Series	Ubuntu Linux 10.10	V		Needed		Needed	Kernel 2.6.35
	Knoppix 6.2	V		Needed		Needed	Kernel 2.6.32

3. 可靠度測試報告與規範 RELIABILITY TEST REPORT AND SPECIFICATIONS

3.1 可靠度規格 RELIABILITY SPECIFICATIONS

環境測試條件列表如下所示。

Environment test conditions are listed as follows.

項次 ITEMS	規格 SPECIFICATIONS
高溫高濕測試 Temperature Cycling	The product should be allowed to stand at 60±2°C with 90% RH for 240hrs un-load condition and allowed to be normalized for 4hrs.
冷熱衝擊測試 Thermal Shock	The product should be allowed to stand at -40°C to +85°C for 30min/cycle with totally 50cycles and allowed to be normalized for 4hrs.
高溫儲存測試 High Temp. Storage	The sample should be allowed to stand at +85°C for 240hrs un-load condition and allowed to be normalized for 4hrs.
低溫儲存測試 Low Temp. Storage	The sample should be allowed to stand at -40°C for 240hrs un-load condition and allowed to be normalized for 4hrs.

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4. 標籤釋義 PRODUCT LABEL EXPLANATION

4.1 條碼定義 BARCODE DEFINITION

4.1.1 控制器料號編碼原則 Coding rule for control board part number used

Serial ID: MT-A-B-CCC-DD-E-F-GG

CODE	MEANING	DESCRIPTION
MT	MT	Vendor internal use for account code
A	Numbers	Vendor internal use for material level classification
B	Letter	Vendor internal use for sub-category definition
CCC	Number	Vendor internal use for touch screen size definition
DD	Letter & Number	Vendor internal use for solution classification
E	Letter	Vendor internal use for interface definition
F	Letter	Vendor internal use for shielding definition of EMI and ESD
GG	Serial No.	Vendor internal use for sequence code of product

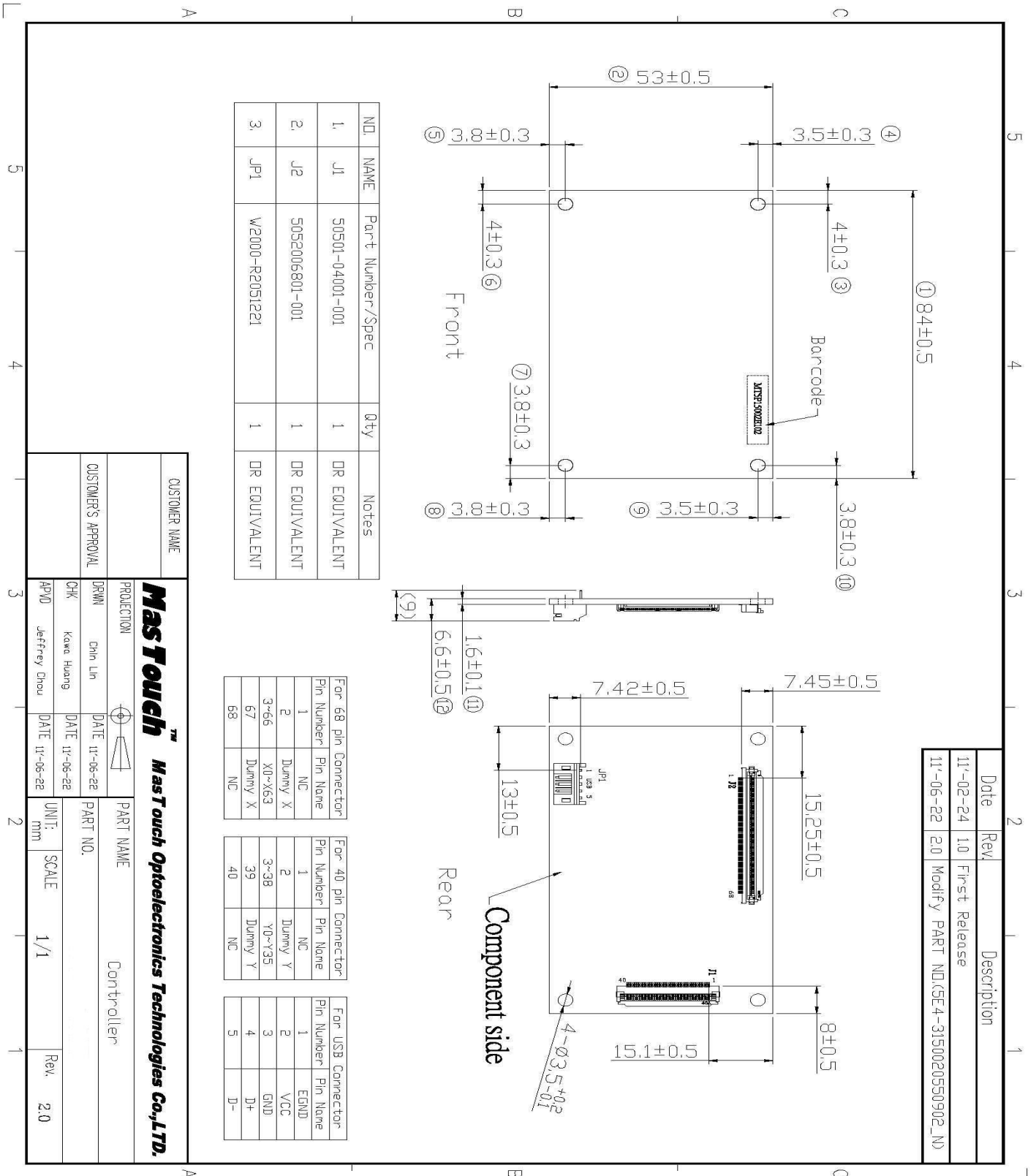
4.1.2 生產序號編碼原則 Coding rule for manufacturing serial used

Serial ID: A-B-C-D- E-FFFFF-G-H-II-JJJJ

CODE	MEANING	DESCRIPTION
A	Letter	Vendor internal use for production level classification
B	Letter	Vendor internal use for manufacture side classification
C	By year	Changed by 1~X
D	By month	Changed by 1~C
E	By day	Changed by 1~V
FFFFF	Letter	Vendor internal use for project code
G	Letter	Vendor internal use for project version No.
H	Letters	Vendor internal use for sub-category definition
II	Letters	Vendor internal use for WO No.
JJJJ	Serial No.	Vendor internal use for manufacture sequence code of product

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5. 控制器圖面 CONTROL BOARD DRAWING



Date	Rev	Description
11'-02-24	1.0	First Release
11'-06-22	2.0	Modify PART NO.(SEC-4-3150020550902_N)

MasTouch™ MasTouch Optoelectronics Technologies Co., LTD.

CUSTOMER NAME: _____

PROJECTION:

DATE: 11'-06-22

DRWN: Chin Lin

DATE: 11'-06-22

CUSTOMER'S APPROVAL: _____

CHK: Kawa Huang

DATE: 11'-06-22

APVD: Jeffrey Chou

DATE: 11'-06-22

PART NAME: Controller

PART NO.: _____

UNIT: mm

SCALE: 1/1

Rev: 2.0