



# Specification for Approval

Customer:\_\_\_\_\_

Model Name:\_\_\_\_\_

Supplier Approval			Customer approval
R&D Designed	R&D Approved	QC Approved	
Peter	Peng Jun		



PCB 140.70±0.3

120.7 (OUTLINE)

108 (LCD A.A)

10.00

5.00

75.80 (OUTLINE)

64.8 (LCD A.A)

8.33

5.00

PCB 85.80±0.3

800(H)XRGBX480(V) DOTS

VIEWING DIRECTION

DOTS DETAIL

SCALE: 100X

0.135

0.135

R

G

B

10.00

133.7

52.02±0.3

3.5

3.5

3.5

78.8

37.38±0.5

25

4\* $\phi$ 1.5

1.6

4±0.3

10.6±0.3

5.2±0.3

6.20±0.2

PIN	SYMBOL
1	VCC
2	VCC
3	BUSY
4	TX
5	RX
6	RESET
7	GND
8	GND

项次	内 容	版次	日 期	误 差	比 例	批 准	单 位(mm)	审 核	绘 制	时 间	页 数	名 称: LCM
0	New Drawing	0	2023.3.8	X. ±0.30	1/1					2023.3.8	1/1	型 号: AM-500480-0501P
1	PCB Change	0	2024.1.2	.X ±0.20					SAM			绘制编号:
2				.XX±0.05								
3												

注 释

于都上晴电子有限公司



## General Information

Product Parameters	
Model	AMU-800480-050JP-B
Series	Basic
Core processor	ARM Cortex-M7 MCU, 128 KB Flash, 1 MB RAM, 480 MHz CPU
Operating system	None, operation upon power-on, FPGA pure hardware display driver
Protocol	AMSON configure command set (Parts can be upgraded to be compatible with MODBUS)
Size	5.0 inch
Resolution	800x480
Memory space	1Gbit
Font library	ASCII, GBK, GB2312, UNICODE libraries with various dot matrices. User-definable display font.
Image storage	Store various images.
Color	16.7M color, 24-bit RGB
Voltage	5-26V (error±0.2V)
Communication interface	RS485/ RS232/TTL (TTL level by default)
Connector specification	XH2.54-8P
Image download	Support Micro USB/ TF Card (Micro SD Card)/UART, Micro USB for R&D, TF Card (Micro SD Card) download for production.
Real-time clock (RTC)	Support countdown, timer, year-month-day display
Active area (mm)	W x H = 108 x 64.8
Dimension (mm)	W x H = 140.70 x 85.80
Software for master computer	-
AV input	Not supported
Audio	Not supported
Video	Not supported
Ethernet	Not supported
Wi-Fi	Not supported

## Core competitiveness

Learning cycle	Get familiarized with development environment within 30 minutes, complete human-machine interaction design within 3 days.
Startup time	Operation upon power-on, no system loading time
Configuration control	Various configuration controls are available, including button, text, progress bar, sliding block, instrument, animation, data record
Data record	Data record can be sent to TF card(Micro SD card).
Remote upgrade	User host upgrades screen firmware or project images remotely
Information push	Some models support cloud push video or advertisement display or communication display of mobile APP and screen
Layer technique	The system has multiple built-in display layers to provide higher switching speed
Reliability	The product passes the tests of high and low temperature, ESD, group pulse and radiation by industrial standards.
Life cycle	Traditional brand processors are adopted, so there will not be supply shortage for years.



## Touch panel

Touch panel type	Capacitive, G+P structure
Mode	Single-point
Surface hardness	6H
Transmittance	85%

## LCD display

Display type	TFT LCD
Backlight tube	LED
Brightness (cd/m <sup>2</sup> )	350
Backlight life (h)	50000
Contrast Ratio	500
Gray Scale Inversion Direction	6 O'clock
Eyes Viewing Direction	12 o'clock

## Environment and certificate

Operation temp.	-20 to 70°C
Storage temp.	-30 to 80°C
Vibration test	Frequency: 10Hz~55Hz~10Hz Amplitude: 1.5MM X, Y, Z direction for total 3 hours
ESD test	Voltage: ±8KV, R:330Ω, C:150PF, Air Mode, 10times
High & low temp. test	Operation: 70°C±2°C × 96 hours Operation: -20°C±2°C × 96 hours Storage: 80°C±2°C × 96 hours Storage: -30°C±2°C × 96 hours