

PREPARED BY : (制作人 :)	 EASYQUICK TECHNOLOGY SPECIFICATION 深圳市易快来科技股份有限公司	SPEC No: (规格型号:) EQT299HYZ007G
R&D APPROVED BY: (研发核准:)		FILE No : (档案编号 :) EQ2021072002
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APPLICABLE DIVISION (适用范围) <input checked="" type="checkbox"/> Mobile LCD DIVISION <input checked="" type="checkbox"/> 手机液晶模组		

For **QVGA** TFT LCD Module& CTP Model No

EQT299HYZ007G SPEC&IIS

Customer side signature (客户方签名)

<div style="display: flex; justify-content: space-between;"> 部门 签名 </div>	Acknowled -ge (承认人)	Date (日期)	Remarks (备注)
Structure (结构)			
Electronics (电子)			
Item (项目)			
Quality (品质)			

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(易快来科技)

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1. Application (应用)

This data sheet is to introduce the specification of **EQT299HYZ007G** active matrix **16.7M** color TFT LCD module.

Main color LCD module is controlled by Driver IC **ST7701S**.

If any problem occurs concerning the items not stated in this specification, it must be solved sincerely by both parties after deliberation.

As to basic specification of driver IC refer to the IC specification and handbook.

本规格书是为了介绍 **EQT299HYZ007G** 有源矩阵 **16.7M** 彩色 TFT LCD 模块的规格。

主彩色液晶显示模块由驱动芯片 **ST7701S** 控制

本规范未尽事宜如有问题，双方必须认真协商解决。

驱动 IC 的基本规格参照《IC 规格书》和相关《手册》。

2. Construction and Outline (结构与大纲)

Construction: LCD panel, Driver (COG), FPC with electric components, **6** white LED lump, prism sheet, diffuser, light guide and reflector, plastic frame to fix them mechanically.

There shall be no scratches, stains, chips, distortions and other external drawbacks that may affect the display function.

In order to realize thin module structure, double-sided adhesive tapes are used to fix LCD panels. As these tapes do not guarantee to permanently fix the panels, LCD panel may rise from the module when shipped from factory.

So please make sure to design the system to hold the edges of LCD panel by the soft material such as sponge when LCD module is assembled into the cabinet.

结构:液晶面板，驱动或 COG，带电子元件的 FPC，**6** 个白光 LED 块，棱镜片，扩散器，导光器和反射器，塑料框架机械固定。

不应有可能影响显示功能的划痕、污迹、芯片、畸变等外部缺陷。

为了实现薄型模块结构，采用双面胶带固定液晶面板。由于这些胶带不能保证永久有效固定面板，LCD 面板在出厂时可能会从模块内移动。

所以在液晶模块组包装和进柜时，请务必将包装结构设计成用海绵等软材料支撑液晶面板的边缘。

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3. Mechanical Specification (参数规格)

Table 1 (表 1)

Item(项目)	Specifications(规格)	Unit (单位)
Screen size (屏幕尺寸)	2.99	inch
Display mode (显示模式)	TFT	-
Active area (显示范围)	24.12(H)×72(V)	mm
CTP area (显示范围)	24.72(H)×72.60 (V)	mm
Display format (分辨率)	268×RGB×800	-
Dot pitch (点距)	0.03(H) X0.09(V)	mm
Pixel configuration (像素)	R. G. B. strip	-
Outline Dimensions (外形尺寸)	29.88(H)×143.46(W)×3.28(D)	Note 1
View Angle (视角)	ALL	
Base color Notes (基色)	Normal Black	-
Weight (重量)	TBD	
Driver/ CTP IC (驱动/触摸 IC)	ST7701S/CST328	

Note 1: Not include FPCs & Bezel extrude structure.

备注 1: 不包括排线和面板构造

4. Interface signals (接口信号)

Table 2 (表 2)
Table 2 LCM PIN

Pin No.	LCD 接口 pin 定义	LCD 接口说明
1	GND	地
2	VCC-3V	电源 VCC=3V
3	IOVCC	电源 IOVCC=3V
4	TE	LCD_TE
5	RESET-3V	LCD 复位
6	NC	
7	GND	地
8	TP_VCC-3V	TP 电源 VCC=3V
9	TP_RESET-3V	TP 复位=3V
10	TP_INT-3V	TP 中断=3V
11	TP_SDA-3V	TP 数据=3V
12	TP_SCL-3V	TP 时钟=3V
13	GND	地
14	DON	MIPI 数据线 0-
15	DOP	MIPI 数据线 0+
16	GND	地
17	CLKN	MIPI 时钟-
18	CLKP	MIPI 时钟+
19	GND	地
20	D1N	MIPI 数据线 1-
21	D1P	MIPI 数据线 1+
22	GND	地
23	LEDK	背光电源+
24	LEDA	背光电源-

Notes: 1.FPC Connector 24pin

备注: 1.24pin 排线连接器定义

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Table 3 (表 3)

Assembled on (组装)	Item (条目)	Description (描述)
Phone PWB (手机主板)	Connector Type (连接类型)	Connection (卡扣)
	Pin Amount (数量)	24
	Manufacturer (制造商)	创佳
	Part Number(零件号)	A132A-10024031-R01

Notes: 3.FPC Connector Type

备注:3.排线连接器类型

5.LED back light (背光灯)

At main panel the back light uses 6 pcs edge light type white LED.

在背光的主面板用 6 颗白色 LED 灯

Table 4 (表 4)

Parameter (参数)	Symbol (样品)	Min. (最小值)	Typ. (标准值)	Max.(最大值)	Unit (单位)	Remark (备注)
LED Voltage (LED 电压)	VLED	-	18	-	V	[Note 5-2]
LED Current (LED 电流)	ILED	-	20	-	mA	
Power Consumption (电功率)	WLED	-	360	-	mW	[Note 5-2]
Number of LED components (LED 组成部件数量)		6			PCS (片)	
Connection Type(Serial/Parallel/Other) 连接类型(串联/并联/其他)		1x6 LEDs				

Note:

*6 pcs of LED

*Please consider Allowable Forward Current on used temperature

*6 颗灯

* 请考虑允许范围内的正向电流的使用温度

6. Optical Characteristics (光学特征)

Table 7 (表 7)

Item 项目		Symbol (样品)	Condition (条件)	Min. (最小值)	Typ. (标准值)	Max. (最大值)	Unit (单位)	Remark (备注)
Response time (响应时间)	Rise (上升)	Tr+Tf	$\theta=0^\circ$	-	30	40	ms	
	+Fall (下降)							
Brightness (亮度)		Br	$\theta=0^\circ$	650	700	-	Cd/m ²	
Contrast ratio (对比度)		CR	$\theta=0^\circ$	1000	1200	-	-	Note 1,2,6
Viewing angle(with Polarizer) (视角)	Top (顶部)		90°	-	80	-	degree	Note 1,2,6,7
	Bottom (底部)		270°	-	80	-		
	Left (左边)		180°	-	80	-		
	Right (右边)		0°	-	80	-		
White Chromaticity (白色色度)		X	$\theta=0^\circ$	0.270	0.300	0.330	-	Note 1,3
		Y		0.290	0.320	0.350	-	
NTSC (色彩饱和度)			-	-	60	-	%	Note 1,3

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8. Packaging Specification

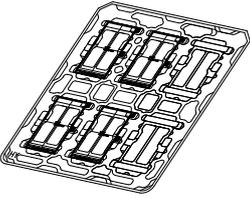
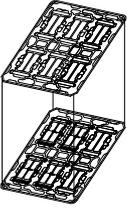
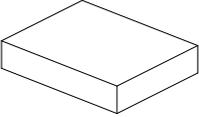
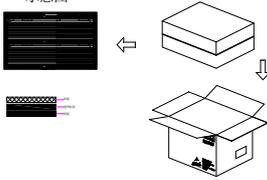
1.1 Package quantity in one Box : 160PCS

1.2 Box Size : 380cm*330cm*210cm

1.3 1 BOX = 2 CARTON

1.4 1 CARTON = 10(Full tray) + 1 (dummy / top tray) =11 tray

1.5 1 TRAY = 8 PCS LCM

<p>(1) 模块平放入吸塑盘内, 每盘放6PCS产品</p> 	<p>(2) 吸塑盘交叉叠放</p> 	<p>(3) 十盘加一个空盘共10x6=60pcs 吸塑盘交叉叠放后用胶袋和胶 纸打包</p>  <p>叠放次序 B C A C B C A</p>																																																																											
<p>(4) 真空包装 将打包好的产品装进包装袋并抽真空密封,</p> 	<p>(5) 产品装箱 先在纸箱底下放一个纸板, 让后放一小包产品进去, 在放一个纸板在上面, 最后在放一个纸板在上面, 二包叠加装箱</p> <p>示意图</p> 	<p>(6) 封箱 外箱标签中须体现供应 商名称、EQ料号及包装 数量。</p>  <p>外箱标签贴于侧面</p> <p>数量: 2x60=120 PCS/箱</p>																																																																											
			<p>REVISIED RECORD</p> <table border="1"> <tr> <td>A</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>B</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>C</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>D</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>E</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>深圳市易快来科技股份有限公司</p> <table border="1"> <tr> <td>Drawn</td> <td>wsl</td> <td>Page:</td> <td>7of7</td> <td>Unit:</td> <td>mm</td> <td>Date:</td> <td>2017-8-2</td> </tr> <tr> <td>Check</td> <td>OYC</td> <td>Rev:</td> <td>A0</td> <td>Scale:</td> <td>1/1</td> <td>Projection:</td> <td></td> </tr> <tr> <td>Approve</td> <td>LGQ</td> <td>Dwn.No</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	A										B										C										D										E										Drawn	wsl	Page:	7of7	Unit:	mm	Date:	2017-8-2	Check	OYC	Rev:	A0	Scale:	1/1	Projection:		Approve	LGQ	Dwn.No					
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