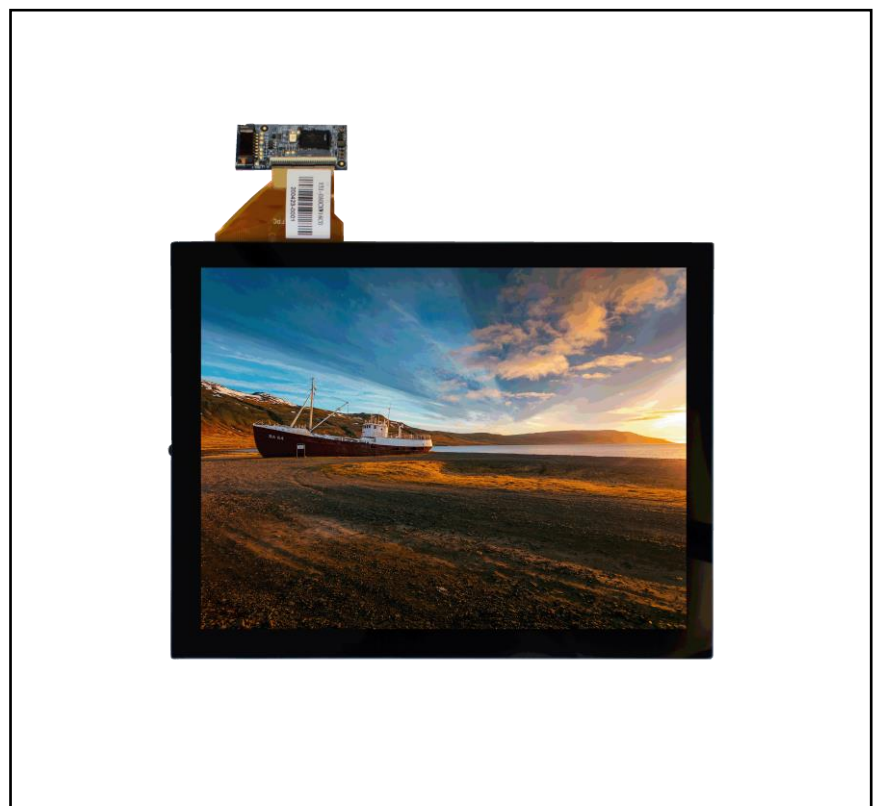**RS PRO**

Features

- 8" TFT
- HDMI Input
- 1024 x 768 Resolution
- Projected Capacitive (PCAP) Touch Sreen
- USB Touch Interface
- 1100 cd/m² Brightness
- IPS Panel
- Full Viewing Angles
- -20°C to +70°C Operating Temperatures
- High Contrast Ratio
- 16.7M Colours

RS PRO HDMI TFT LCD Display

RS Stock No.: 254-0009

RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

HDMI TFT LCD Display

Product Description

This RS PRO HDMI Display is an 8" (4:3) TFT LCD Display, with a high resolution of 1024x768 (XGA), IPS technology and high brightness. This model is composed of:

- A TFT LCD panel
- Backlight system
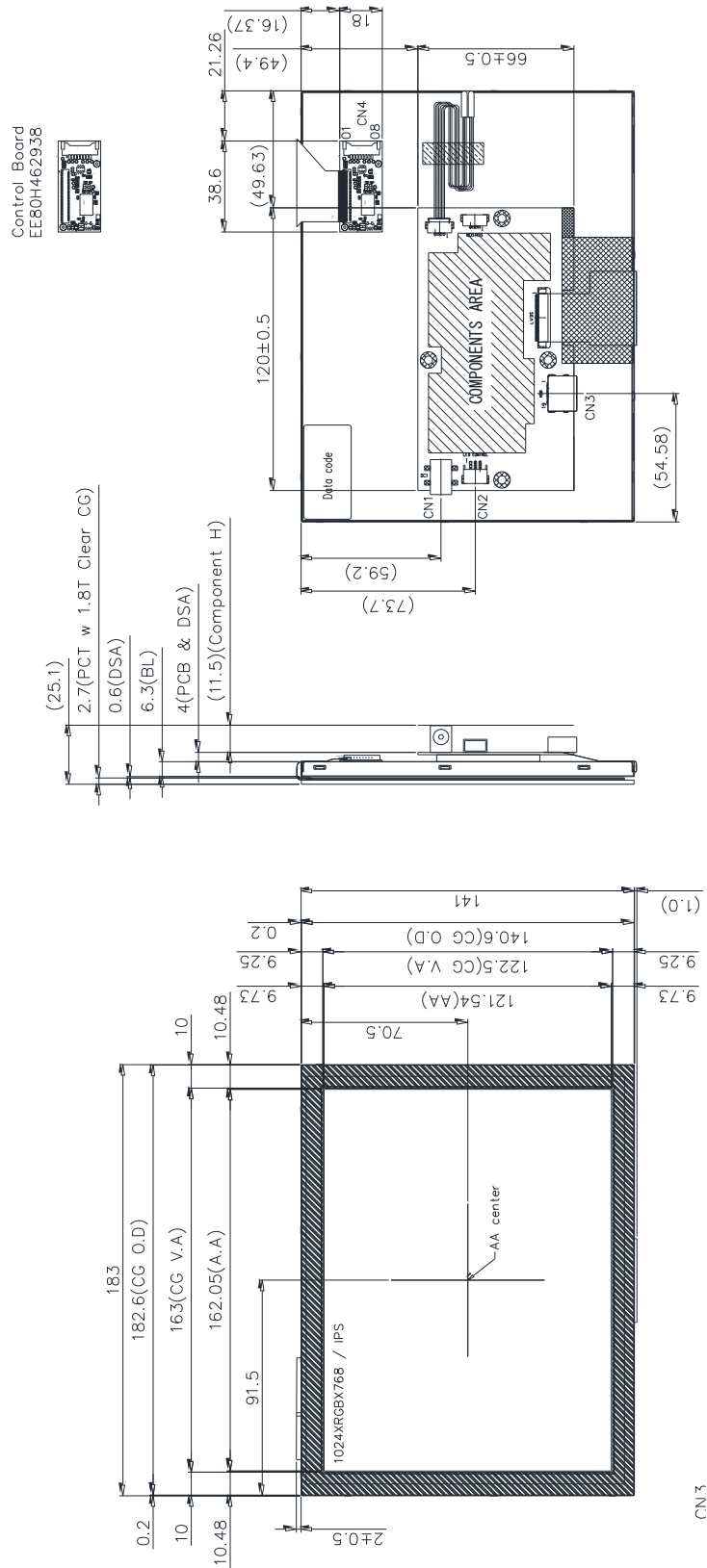- A projected capacitive touch panel
- HDMI interface

It is designed to make Raspberry Pi usage easy. You can simply use this TFT display with your Raspberry Pi, or any other computer device with HDMI as an output. The high brightness and wide operating temperature make this model the ideal solution for any indoor or outdoor application.

General Specifications

Panel Size	8"
Resolution	1024x768
Display Technology	IPS
Contrast Ratio	800
Brightness (cd/m2)	1100
Video Input	HDMI
Operating Temperature	-20°C to +70°C
Storage Temperature	-30°C to +70°C
Touch Panel	Projected Capacitive
Touch Panel Interface	USB

Mechanical Specifications

Overall Dimensions WxHxD (mm)	183 x 141 x 25.1
Active Area WxH (mm)	162.05 x 121.54

Control Board
EE80H462938

(16.37)
18
21.26
(49.4)
66±0.5
38.6
(49.63)

CN4
08
01

COMPONENTS AREA

HDMI

LVDS

CN3

120±0.5

(54.58)

Data code

CN1
CN2

(59.2)

(73.7)

(25.1)
2.7(PCT w 1.8T Clear CG)
0.6(DSA)
6.3(BL)
4(PCB & DSA)
(11.5)(Component H)

141
(1.0)
0.2
140.6(CG O.D)
9.25
122.5(CG V.A)
9.73
121.54(AA)
70.5

10
10.48

183
182.6(CG O.D)
163(CG V.A)
162.05(A.A)
91.5

AA center

1024XRGBX768 / IPS

0.2
10
10.48
2±0.5

CN3

CN3 – HDMI A Type

Pin No.	Symbol	I/O	Function
1	TMDS 2+	I	TMDS Data2+
2	GND	P	TMDS Data2 Shield
3	TMDS 2-	I	TMDS Data2–
4	TMDS 1+	I	TMDS Data1+
5	GND	P	TMDS Data1 Shield
6	TMDS 1-	I	TMDS Data1–
7	TMDS 0+	I	TMDS Data0+
8	GND	P	TMDS Data0 Shield
9	TMDS 0-	I	TMDS Data0–
10	TMDS CLK+	I	TMDS Clock+
11	GND	P	TMDS Clock Shield
12	TMDS CLK-	I	TMDS Clock–
13	N.C.	-	N.C.
14	N.C.	-	N.C.
15	DDC_SCL	I	IIC SCL to EDID ROM
16	DDC_SDA	I/O	IIC SDA to EDID ROM
17	GND	P	DDC/CEC Ground
18	HD_5V	P	+5V Power
19	HPD	O	Hot Plug Detect

CN1 - Power Input – DC Jack SCD480CCS000B00GE or compatible

Pin No.	Symbol	I/O	Function
1	12V	P	Power Supply +12V
2	GND	P	Ground

CN2 – Backlight Control - WAFER P2.0mm: 2001S-03-RTE or compatible

Pin No.	Symbol	I/O	Function
1	GND	P	Ground
2	PWM	I	Back-light Dimming control (internal pull up to 3.3V)
3	N.C.	-	No Connection

CN4 – USB Touch Interface - WAFER P1.25mm: 50278-00801-001 or compatible

Pin No.	Symbol	I/O	Function
1	VDD_5V	P	Power Supply Voltage, 5 Vdc
2	D+	I/O	D+
3	D-	I/O	D-
4	GND	P	Ground
5	N.C.	-	No Connection
6	N.C.	-	No Connection
7	N.C.	-	No Connection
8	N.C.	-	No Connection

Electrical Specifications

HDMI TFT LCD Module

Item	Symbol	Values			Unit
		Min	Typ.	Max.	
Supply Voltage	12V	11	12	13	V
PWM frequency		100		10K	Hz
PWM Dimming Voltage	V_{PWM-IH}	3.3	8	8	V
	V_{PWM-IL}	-	0.3	-	V
Supply Current	ICC(12V)	-	660	710	mA
LED life-time		-	40000	-	Hr

Projected Capacitive Touch Panel

Item	Specification
Screen Size	8.0 inch
Type	Transparent Type Projected Capacitive
Input Mode	Human's Finger
Finger	10
Interface	USB 2.0
Operating system OS	Windows / Linux / Android
Cover glass pencil-hardness	6H
Response time	25
Driver IC	EE80H462938

Optical Characteristics

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Brightness		--	Note1, Note 3, (θ= 0°, Normal Viewing Angle)	880	1100	--	cd/m2
Uniformity		B-uni		70	75	-	%
Contrast Ratio		CR		600	800	--	--
Response Time		Tr + Tf		--	25	50	ms
Color Chromaticity	White	Wx		0.238	0.288	0.338	--
		Wy		0.276	0.326	0.376	--
View angle	Horizontal	θx+	Center CR≥10	78	85	--	
		θx-		78	85	--	
	Vertical	θY+		78	85	--	
		θY-		78	85	--	

Approvals

Declarations	UKCA / RoHS / REACH

Similar Products

Stock No.	Brand	Product Name	Attribute 1	Attribute 2	Attribute 3
254-0008	RS PRO	8" HDMI TFT	1200 cd/m2 Brightness	No Touch	IPS Technology
254-0014	RS PRO	10.4" HDMI TFT	800 cd/m2 Brightness	Capacitive Touch	IPS Technology