

Features

- 12.1" TFT
- HDMI Input
- 1024x768 Resolution
- 1600 cd/m² Brightness
- IPS Panel
- Full Viewing Angles
- -30°C to +80°C Operating Temperatures
- High Contrast Ratio
- 16.7M Colours

RS PRO 12.1, HDMI TFT LCD Display

RS Stock No.: 712-654



RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

This RS PRO HDMI Display is a 12.1" (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*
- *HDMI interface*

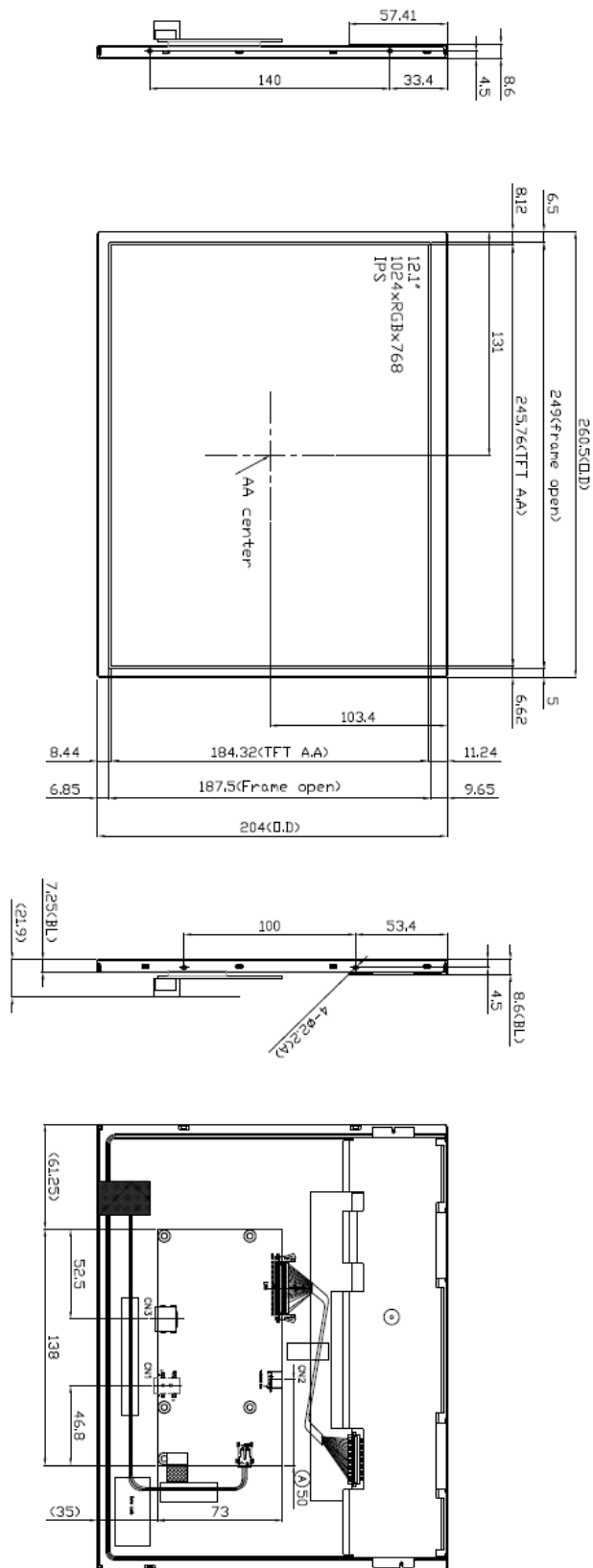
Engineered for seamless integration with embedded computing systems, this TFT display connects effortlessly to any device featuring an HDMI output. Its high-brightness screen and wide operating temperature range deliver outstanding performance in both indoor and outdoor environments, making it the perfect choice for demanding applications.

General Specifications

Panel Size	12.1
Resolution	1024x768
Display Technology	IPS
Contrast Ratio	900
Brightness (cd/m2)	1600
Video Input	HDMI
Operating Temperature	-30°C to +80°C
Storage Temperature	-30°C to +80°C
Touch Panel	No Touch
Touch Panel Interface	N/A

Mechanical Specifications

Overall Dimensions WxHxD (mm)	260.5 x 204 x 21.9
Active Area WxH (mm)	245.76 x 184.32



A 4-M2(User Hole)/2.7mm(Max.Screw Length)

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	N.C.	I	N.C.
3	PWM	-	Back-light Dimming control (internal pull up to 3.3V)

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

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 Duty		17	-	100	%
PWM Dimming Voltage	VPWM-IH	3.3		8	V
	VPWM-IL	-	0.3	-	V
Supply Current	ICC(12V)	-	1210	1310	mA
LED life-time		-	50000	-	Hr

Optical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	
Brightness	--	Note1, Note 3, ($\theta = 0^\circ$, Normal Viewing Angle)	1280	1600	--	cd/m ²	
Contrast Ratio	CR		600	900	--	--	
Response Time	Tr + Tf		--	30	40	ms	
Color Chromaticity	White		Wx	0.251	0.291	0.331	--
			Wy	0.288	0.328	0.368	--
View angle	Horizontal	θ_{x+}	80	85	--		
		θ_{x-}	80	85	--		

	Vertical	θY+		80	85	--	
		θY-		80	85	--	

Approvals

Declarations	UKCA / RoHS / REACH
---------------------	---------------------

Similar Products

Stock No.	Brand	Product Name	Attribute 1	Attribute 2	Attribute 3
712-655	RS PRO	12.1" HDMI TFT	1300 cd/m2 Brightness	PCAP Touch	IPS Technology
712-658	RS PRO	15" HDMI TFT	1350 cd/m2 Brightness	No Touch	IPS Technology