

## HTT50

For all variants of the HTT50

**Hardware Manual**

Revision 1.1



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## Revision History

Revision	Date	Description	Author
1.1	February 2, 2018	Added -TPC variant drawing	Divino
1.0	November 6, 2017	First Release	Divino

## HTT50 Technical Specifications

The HTT50 is a 5.0" TFT display with an HDMI interface. The 800x480 resolution offers crisp images, and video feedback, with 24-bit Full colour capabilities. The HTT can be configured with resistive, capacitive, or non-touch panels, making this display suitable for any application.

### Available Headers

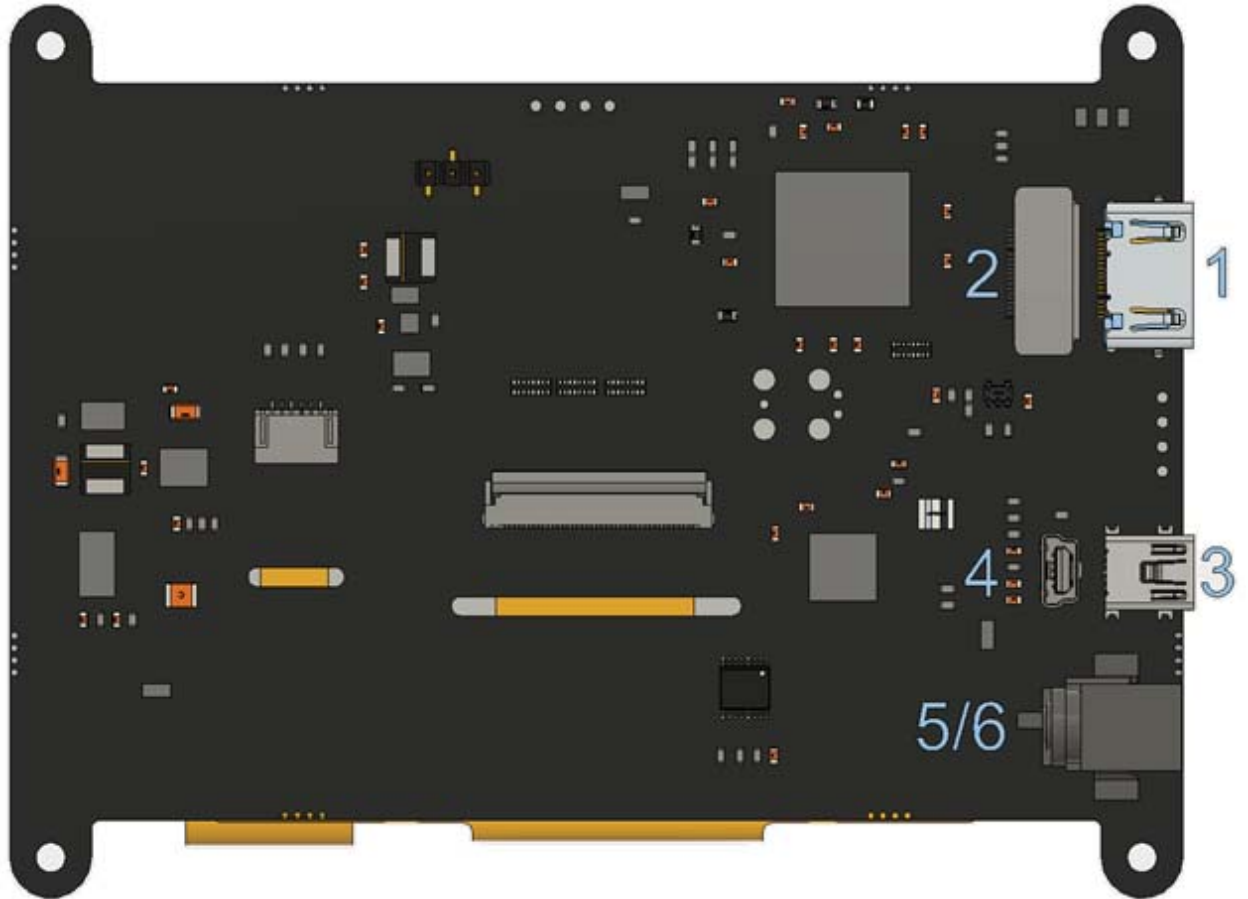


Figure 1: HTT Header Locations

Table 1: HTT50A Headers and Mates

#	Header	Standard Mate	Population
1	HDMI Port, Horizontal, Type A Standard	Type A Standard HDMI Cable	-H5
2	HDMI Port, Vertical, Type A Standard	Type A Standard HDMI Cable	-H6
3	Mini USB, Horizontal: Touch & Power	Mini-B USB Cable	-H5
4	Mini USB, Vertical: Touch & Power	Mini-B USB Cable	-H6
5	Barrel Jack: 2.1mm Center Positive	Power Adaptor	Optional
6	External Power, 2-1445057-2	Micro MATE-N-LOCK 1445022-2	-VPT model

# Dimensional Drawings

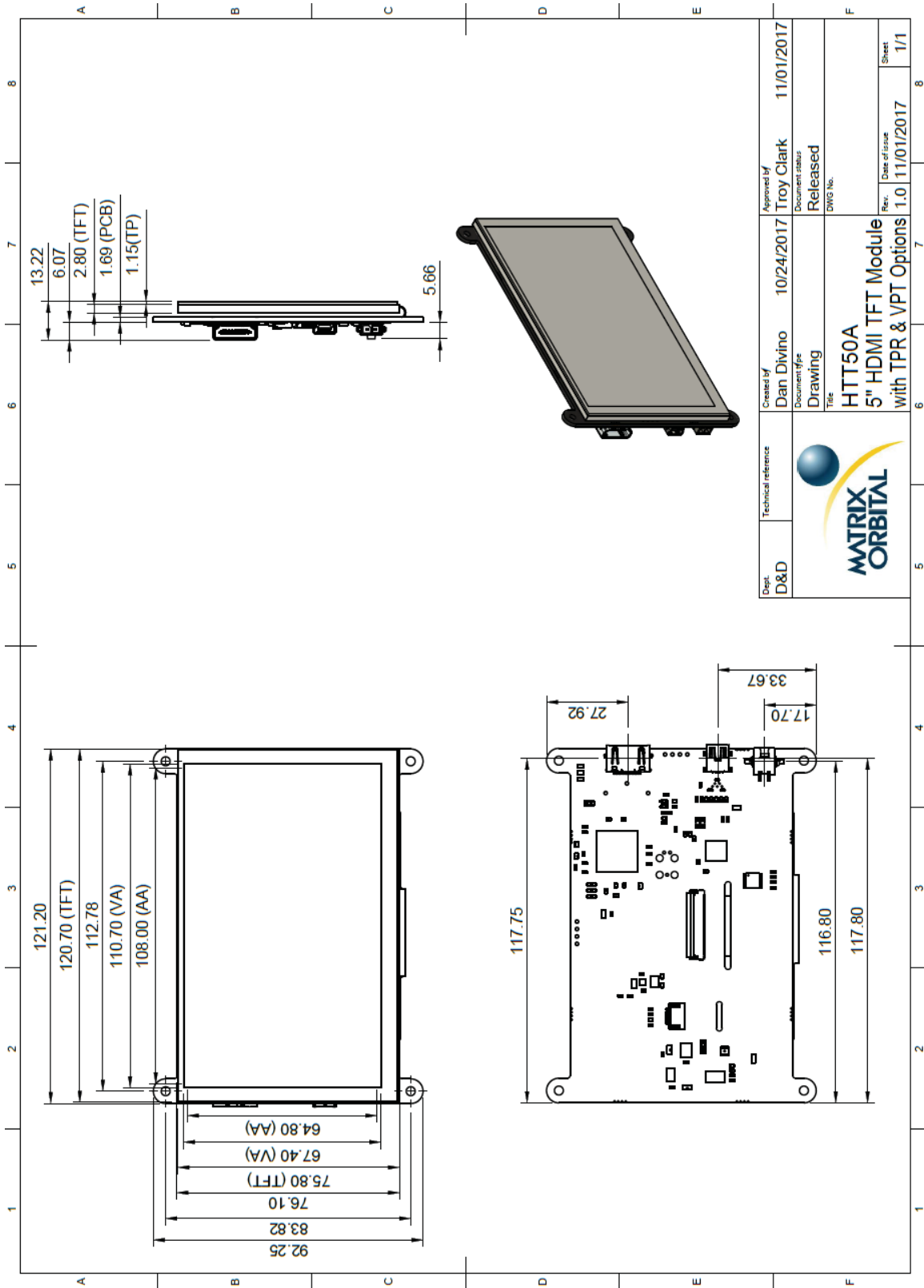


Figure 2: Resistive Touch Panel HTT50A Dimensional Drawing

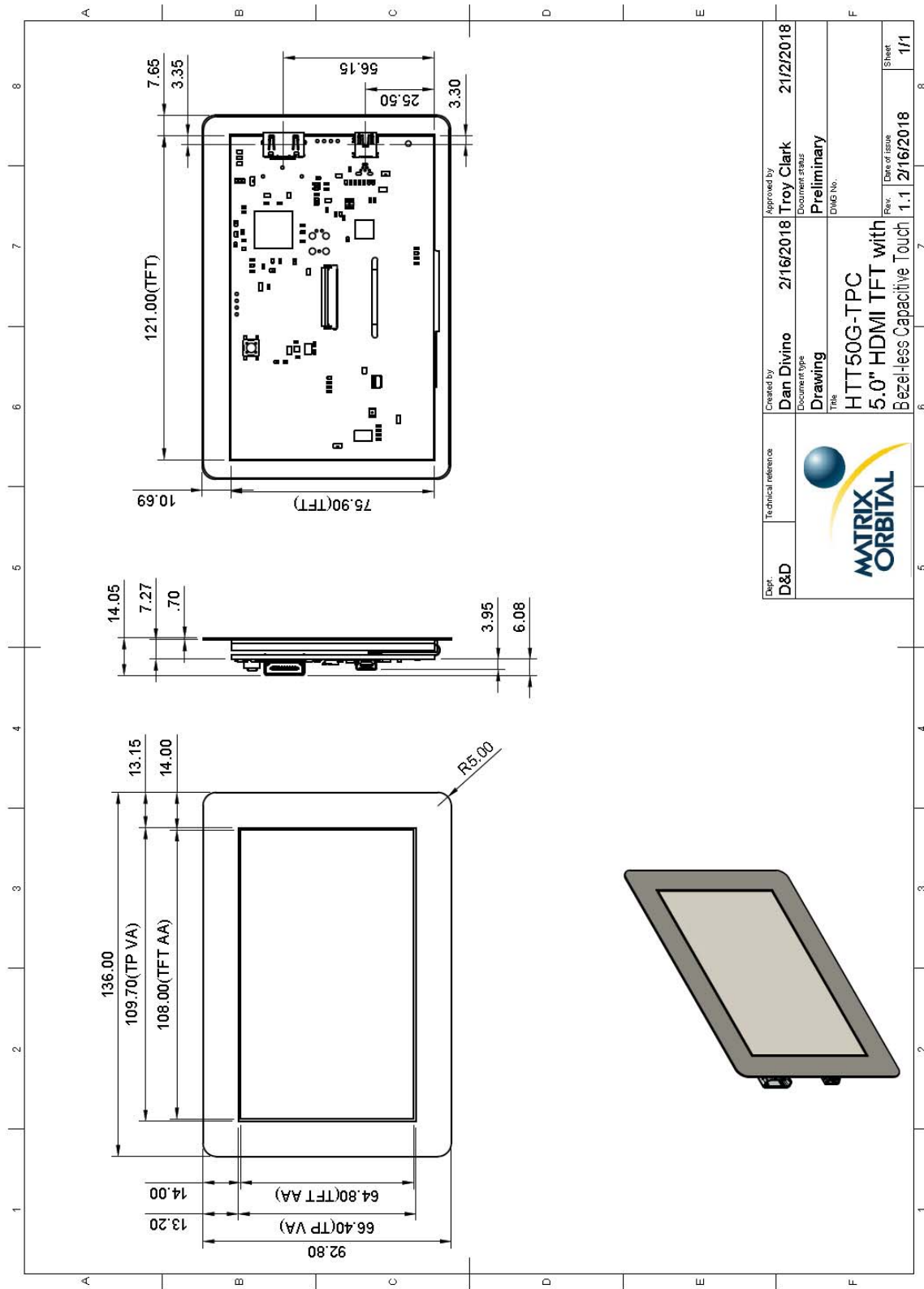


Figure 3: Bezel-less Capacitive Touch Panel HTT50G Dimensional Drawing

## Characteristics

### Optical

Table 2: HTT50 Optical Characteristics

Module Size	121.20 x 92.25 x 12.07	mm
Viewing Area	110.70 x 67.40	mm
Active Area	108.00 x 64.80	mm
Pixel Pattern	800 x 480 x 24bit RGB	
Pixel Pitch	0.135 x 0.135	mm
Luminance	380	cd/m <sup>2</sup>
Viewing Angle	70° Left, Right, Up 50° Down	
Contrast Ratio	500:1	
Backlight Half-Life	20,000 hours	

### Power

Table 3: HTT50 Typical Power Characteristics

Parameter	Min	Typ	Max	Unit	Remarks
Logic	-	275	-	mA	Backlight Off
Backlight	0	-	225	mA	Off, Mid, Max

Table 4: HTT50 Maximum Power Characteristics

Parameter	Min	Typ	Max	Unit	Remarks
Supply Voltage	4.75	5.0	5.25	V	Standard Voltage (V5)
	5.0	12.0	35.0	V	Wide Voltage (VPT)

### Environmental

Table 5: HTT50 Environmental Characteristics

Operating Temperature	0°C to +70°C
Storage Temperature	-30°C to +80°C
Operating Relative Humidity*	90% (T < 60°C)

\*Note: No condensation at any temperature

## Options

Table 6: Part Numbering Scheme

HTT	50	A	-TPR	-BLM	-B0	-H5	-CH	-V5
1	2	3	4	5	6	7	8	9

Table 7: Display Options

#	Designator	Options
1	Product Type	HTT: Graphic TFT Display
2	Display Size	50: 5.0"
3	Screen Type	A: A Type G: G-Type
4	Touch	-TPN: No touch panel -TPR: Resistive touch panel -TPC: Capacitive touch panel -CTB: Bezel-less capacitive touch panel
5	Backlight	-BLM: 300 Nit < Brightness < 600 Nit -BLH: 600 Nit < Brightness < 1000 Nit -BLD: Brightness > 1000 Nit
6	Bezel	-B0: None
7	Headers	-H5: Horizontal Connectors -H6: Vertical Connectors
8	Protocol	-CH: HDMI interface
9	Voltage	-V5: 5.0V Input Voltage -VPT: Regulated 5V - 35V Input Voltage

## Power Options

Table 8: Powering Options

Option	Voltage Input
V5	USB Header
VPT	Barrel Jack/External Power Header



## Recommended Accessories

### HDMI Cable



Figure 4: HDMI Cable

**Part Number:**  
HDMI3FT or HDMI6FT

**Description:**  
3ft (1m) or 6ft (2m) HDMI Cable

### USB Cable



Figure 5: EXTMUSB3FT

**Part Number:**  
EXTMUSB3FT

**Description:**  
3ft (1m) Mini-B USB Cable

### Power Adaptor



Figure 6: PWR-ACDC-5V2A

**Part Number:**  
PWR-ACDC-5V2A

**Description:**  
9ft (2.7m) AC to DC power adapter with 2.1mm center positive barrel jack.

Input Voltage: 100-240V AC  
Output Voltage: 5V DC @ 2A

AC Plugs Included: North American (NEMA), Europlug (Type C), UK (Type G), Australia/China/New Zealand/Argentina (Type I)

## Support

Phone: 403.229.2737

Email: [support@matrixorbital.ca](mailto:support@matrixorbital.ca)

Manuals: <http://www.matrixorbital.ca>

Forums: <http://www.lcdforums.com/forums>

## Contact

### Sales

Phone: 403.229.2737

Email: [sales@matrixorbital.ca](mailto:sales@matrixorbital.ca)

### Support

Phone: 403.229.2737

Email: [support@matrixorbital.ca](mailto:support@matrixorbital.ca)

### Online

Purchasing: [www.matrixorbital.com](http://www.matrixorbital.com)

Support: [www.matrixorbital.ca](http://www.matrixorbital.ca)

## The Netherlands



Elektrostraat 17  
NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33  
F: +31 (0)53 573 33 30  
E: [nl@texim-europe.com](mailto:nl@texim-europe.com)

## Belgium



Zuiderlaan 14 bus 10  
B-1731 Zellik

T: +32 (0)2 462 01 00  
F: +32 (0)2 462 01 25  
E: [belgium@texim-europe.com](mailto:belgium@texim-europe.com)

## UK & Ireland



St. Mary's House, Church Lane  
Carlton Le Moorland  
Lincoln LN5 9HS

T: +44 (0)1522 789 555  
F: +44 (0)845 299 22 26  
E: [uk@texim-europe.com](mailto:uk@texim-europe.com)

## Germany North



Bahnhofstrasse 92  
D-25451 Quickborn

T: +49 (0)4106 627 07-0  
F: +49 (0)4106 627 07-20  
E: [germany@texim-europe.com](mailto:germany@texim-europe.com)

## Germany South



Martin-Kollar-Strasse 9  
D-81829 München

T: +49 (0)89 436 086-0  
F: +49 (0)89 436 086-19  
E: [germany@texim-europe.com](mailto:germany@texim-europe.com)

## Austria



Warwitzstrasse 9  
A-5020 Salzburg

T: +43 (0)662 216 026  
F: +43 (0)662 216 026-66  
E: [austria@texim-europe.com](mailto:austria@texim-europe.com)

## Nordic region



Sdr. Jagtvej 12  
DK-2970 Hørsholm

T: +45 88 20 26 30  
F: +45 88 20 26 39  
E: [nordic@texim-europe.com](mailto:nordic@texim-europe.com)

## Italy



Via Matteotti 43  
IT-20864 Agrate Brianza (MB)

T: +39 (0)395 967 226  
F: +39 (0)395 967 226  
E: [italy@texim-europe.com](mailto:italy@texim-europe.com)

## General information



[info@texim-europe.com](mailto:info@texim-europe.com)  
[www.texim-europe.com](http://www.texim-europe.com)