

DMG19108C156_40WTC



System Hardware

Properties	Parameters
Motherboard Level	Commercial-grade
CPU	RK3566, Quad-core ARM Cortex-A55, 1.8GHz Processor
OS	Linux 4.19
Storage	8Gbytes eMMC
RAM	2Gbytes LPDDR4

Display Parameters

Properties	Parameters	Description
Size	15.6 inch	-
Active Area (AA)	343.2mm (W)x192.6mm (H)	-
Viewing Area(VA)	342.2mm (W)x191.6mm (H)	-
Resolution	1920×1080	-
Backlight Service Life	>20000 Hrs	Backlight service life refers to the period the LED backlight operates under test conditions until brightness decreases to 50% of the initial level
Brightness	200nit	100-level brightness adjustment (Flickering may occur at 1%-30% of max brightness; not recommended for use in this range)
Note: Use dynamic screen saver to prevent afterimages from prolonged fixed page display.		

Touch Parameter

Properties	Parameters
Touch Type	Capacitive touch panel

Power Supply

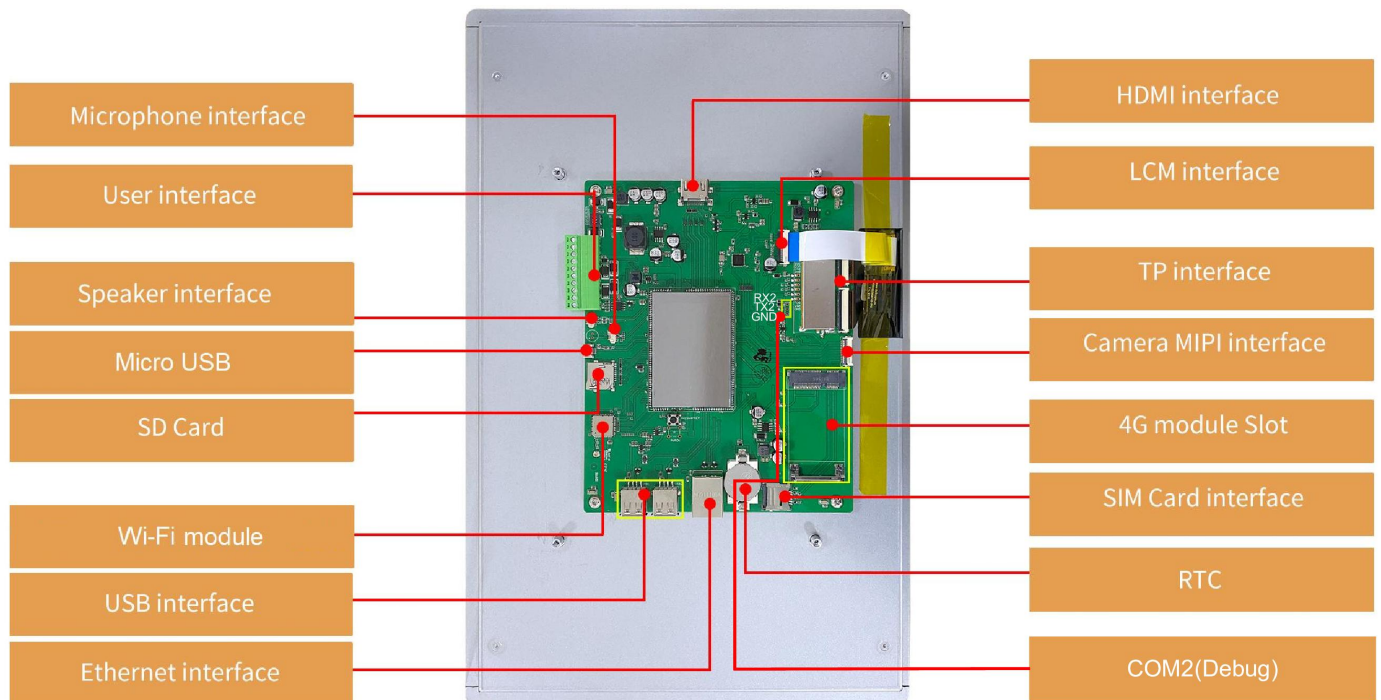
Properties	Min	Typ	Max	Unit
Power Voltage	9.0	12.0	36.0	V
Recommended power supply: 12V 1A DC				

Environment & Reliability Test

Properties	Conditions	Min	Typ	Max	Unit
Working Temperature	60%RH at 12V voltage	-20	25	65	℃
Storage Temperature	-	-30	25	80	℃
Working Humidity	25℃	10%	60%	90%	RH
Conformal Coating	Y				
ESD	Air: ±8KV; Contact: ±6KV				
Additional cooling required for operation above 65℃.					

● Peripherals and Interfaces

Properties	Description
User Interface	10Pin_3.81mm Horizontal socket
COM	RS232*2(COM5 & COM9), RS485*1(COM8), TTL*1(COM0), TTL*1(COM2, debug)
Ethernet	10/100Mbps
USB	USB 2.0*2 (HOST), Micro USB*1 (OTG)
SD Card	Max 64G
RTC	Accuracy: $\pm 20\text{ppm @}25^{\circ}\text{C}$
Speaker	2Pin_1.25mm interface*1
Microphone	2Pin_1.25mm interface*1
Camera	USB*1/MIPI*1(front or rear optional)
Wi-Fi	IEEE 802.11b/g/n, 2.4GHz, Wi-Fi 4
Bluetooth Version	BT4.2
4G Module	Factory not configured, customizable to add
HDMI	23PIN_HDMI_SH

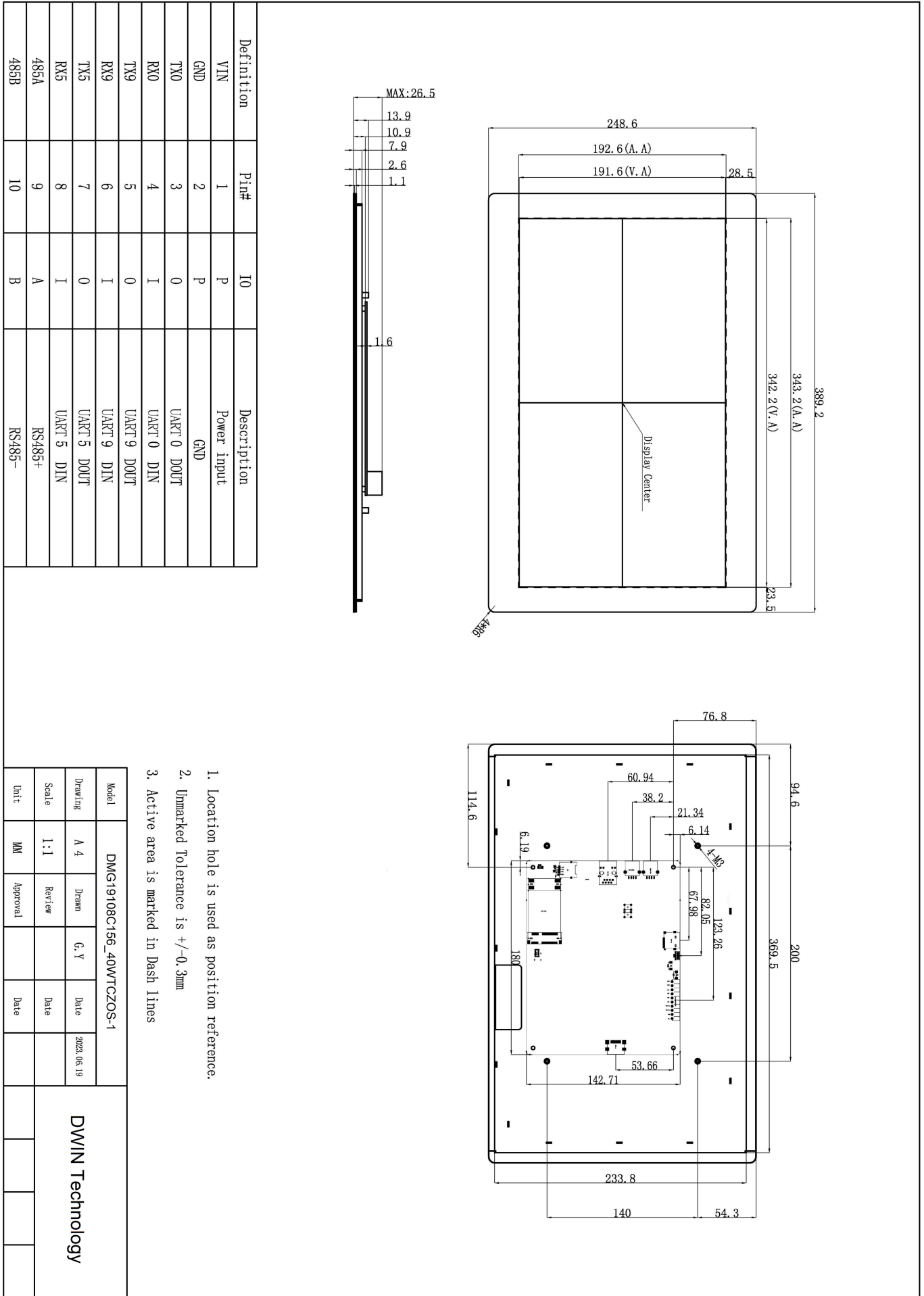


● Development Platform

Development	
Linux	QTCreator2.7.2 and above

● Packing Capacity & Dimension

Dimension				
Dimension	389.2(W)*248.6(H)*26.5(T)mm			
Net Weight	-			
Packing Capacity				
Model	Size	Layer	Quantity/Layer	Quantity(Pcs)
Carton1:	220mm(L)*160mm(W)*47mm (H)	-	-	-
Carton2:	250mm(L)*200mm(W)*80mm (H)	-	-	-
Carton3:	320mm(L)*270mm(W)*80mm (H)	-	-	-
Carton4:	525mm(L)*330mm(W)*80mm(H)	1	1	1
Carton5:	450mm(L)*350mm(W)*300mm(H)	-	-	-
Carton6:	570mm(L)*340mm(W)*385mm(H)	1	5	5



Revision Records

Rev.	Revise Date	Content	Editor
00	2024-10-12	First edition	Chen
01	2025-01-03	Modify the voltage value range, add development	Chen
02	2025-03-12	Add the description of Bluetooth	Chen
03	2025-03-28	Update the rang of temperature	Chen
04	2025-06-17	Update the description of Wi-Fi module	Chen

Please contact us if you have any questions about the use of this document or our products, or if you would like to know the latest information about our products:

Customer service Tel: +86-400-018-9008

Customer service E-mail: dwinhmi@dwin.com.cn

Website: www.dwin-global.com

DWIN Developer Forum: <https://forums.dwin-global.com/index.php/forums>

Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!

Important Disclaimer

DWIN reserves the right to make any changes to product designs without prior notice.

Customers should ensure strictly adhering to all the relevant standards and requirements during the product application process, including but not limited to functional safety, information security, and regulatory provisions.

DWIN shall not bear any joint and several liability for any consequences that may arise from customers' adoption of DWIN products. In particular, for risks that may lead to significant property losses, environmental hazards, personal injury, or even death, especially in high-risk application areas such as military applications, flammable and explosive places, and life-saving medical equipment, customers should independently assess the risks and take corresponding preventive and protective measures. DWIN shall not bear any relevant responsibility.

DWIN Technology Technical Document