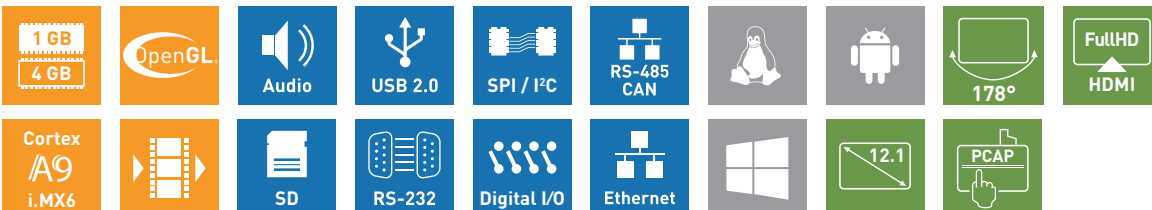
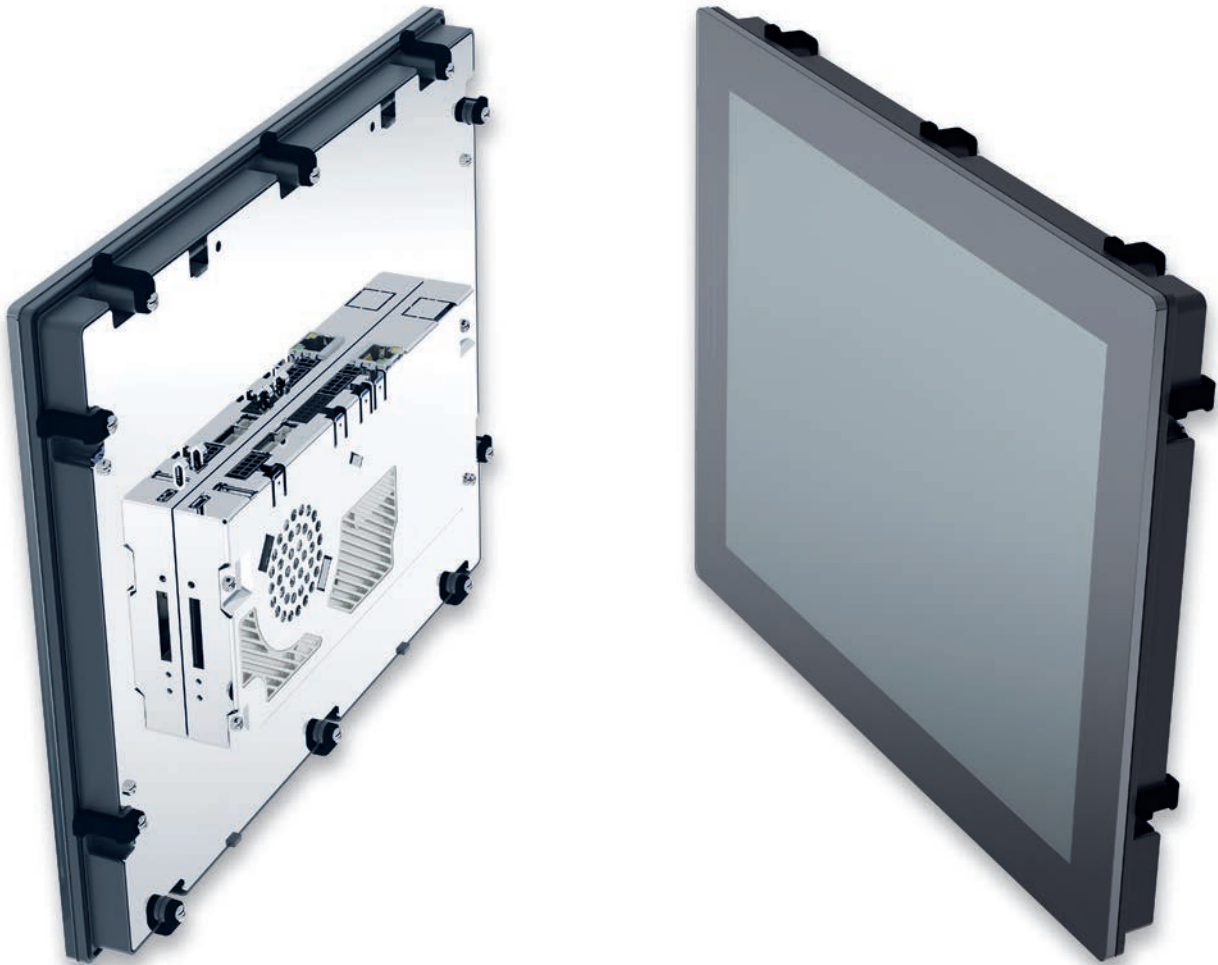
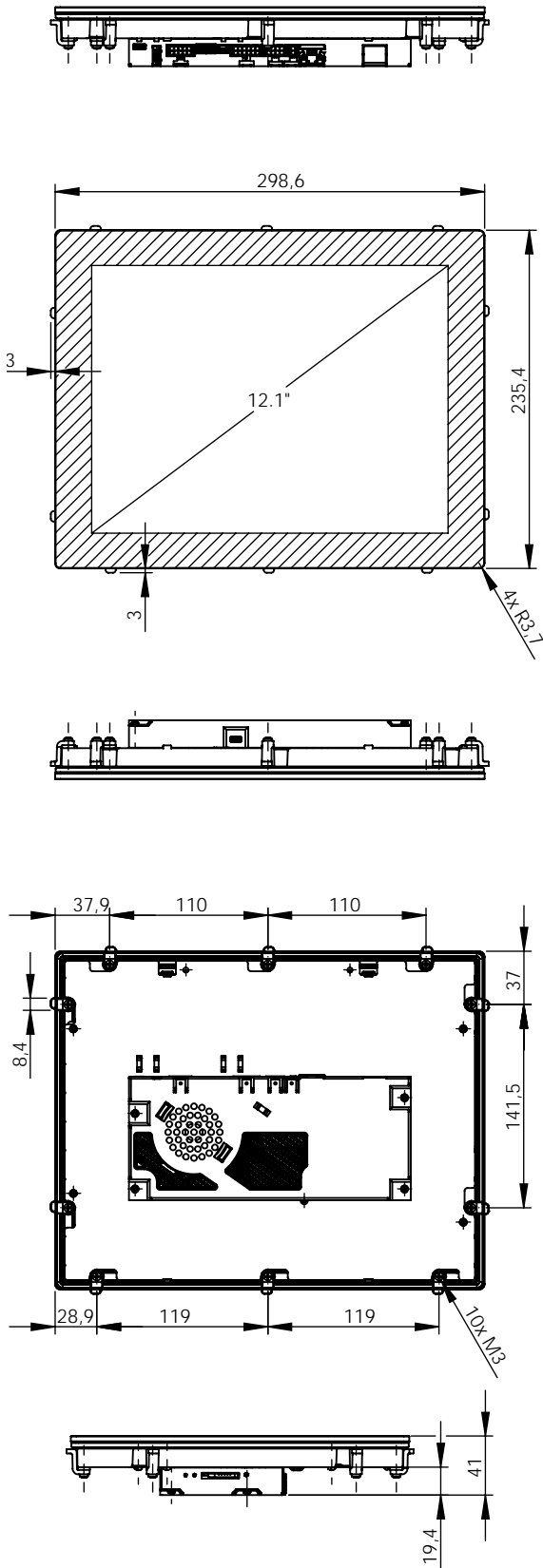


**SANTARO 12.1 SG**  
ARM Cortex-A9 Flush Mount



# TECHNICAL SPECIFICATION

## SANTARO 12.1 SG



CPU	x1	x2
CPU Type	i.MX6Solo	i.MX6Dual
Core Class	ARM Cortex - A9	
Core Clock	800 MHz	1 GHz
Features	NEON for SIMD media acceleration and VFP operations; Multi-format HD 1080p video decoder and HD 720p video encoder hardware engine; L1 cache, 32 KB for instruction, 32 KB for data	
	512 KB L2 cache	1 MB L2 cache
HW Accelerators	OpenGL ES 2.0, OpenVG 1.1 (Emulated on 3D GPU)	OpenGL ES 2.0, OpenVG 1.1
RTC	Accuracy: +/- 30 ppm at 25°C	
<b>Memory</b>		
eMMC Flash	4 GB eMMC Flash	
RAM Standard	1 GB 32 bit DDR3L	1 GB 64 bit DDR3L
SD Card Slot	4 bit MMC/SDIO/SD/SDHC	
<b>Operating Systems</b>		
Supported OS	Windows EC on request, Linux Yocto, Android	
<b>Communication Interfaces</b>		
Digital I/O	2x In, 2x Out (0.7 A)	
Network	1x 10/100 Mbit/s Ethernet (RJ-45)	
USB 2.0	1x 480 Mbit/s Host (Type A) 1x 480 Mbit/s OTG (Type Micro-AB)	
CAN Fieldbus / RS-485	1x CAN (ISO/DIS 11898) + 1x RS-485	1x CAN (ISO/DIS 11898) + 1x RS-485 galvanic isolated
RS-232	2x RS-232 (RX/TX/CTS/RTS)	
Synchronous Serial Interfaces	SPI up to 12 chip selects; I <sup>2</sup> C; Matrix keypad up to 8 x 8	
<b>Video</b>		
Video Output		Full HD micro HDMI
<b>Audio</b>		
Speaker Output	1x speaker (connector), 1.5W RMS (8Ω)	
Audio Internal	1x speaker 0.3 W RMS (8Ω)	
<b>Display and Touch</b>		
Size	12.1 inch/177.8 mm	
Resolution	1024 x 768 pixel	
Brightness	Typ. 480 cd/m <sup>2</sup>	
Backlight Lifetime	Typ. 70000 h	
Viewing Angle	70°, 70°, 80°, 80° (UDRL)	
Color	24 bit (16.7 Mio. colors)	
Touch	projected capacitive multi touch	
<b>Housing</b>		
Front	4.0 mm toughened glass, RAL 9005	
Frame	None	
Rear	ABS-PC/1.4016 stainless steel, foam seal	
Ingress Protection	Front IP 66/Rear IP20	
<b>Device Dimensions</b>		
W x H x D	298.6 x 235.4 x 41.1 mm	
Weight	tbd.	
<b>Power Supply</b>		
Supply Voltage	Nom. 13 to 32 V DC	
Consumption	Typ. tbd.	
<b>Typical Environmental Conditions</b>		
Storage Temp.	-20 to +70 °C	
Operating Temp.	0 to +60 °C	
Humidity	5 to 90 % RH	

"THIS PRODUCT CAN BE MODIFIED BY ALTERNATIVE ASSEMBLY. PLEASE CONTACT US FOR AVAILABLE OPTIONS."