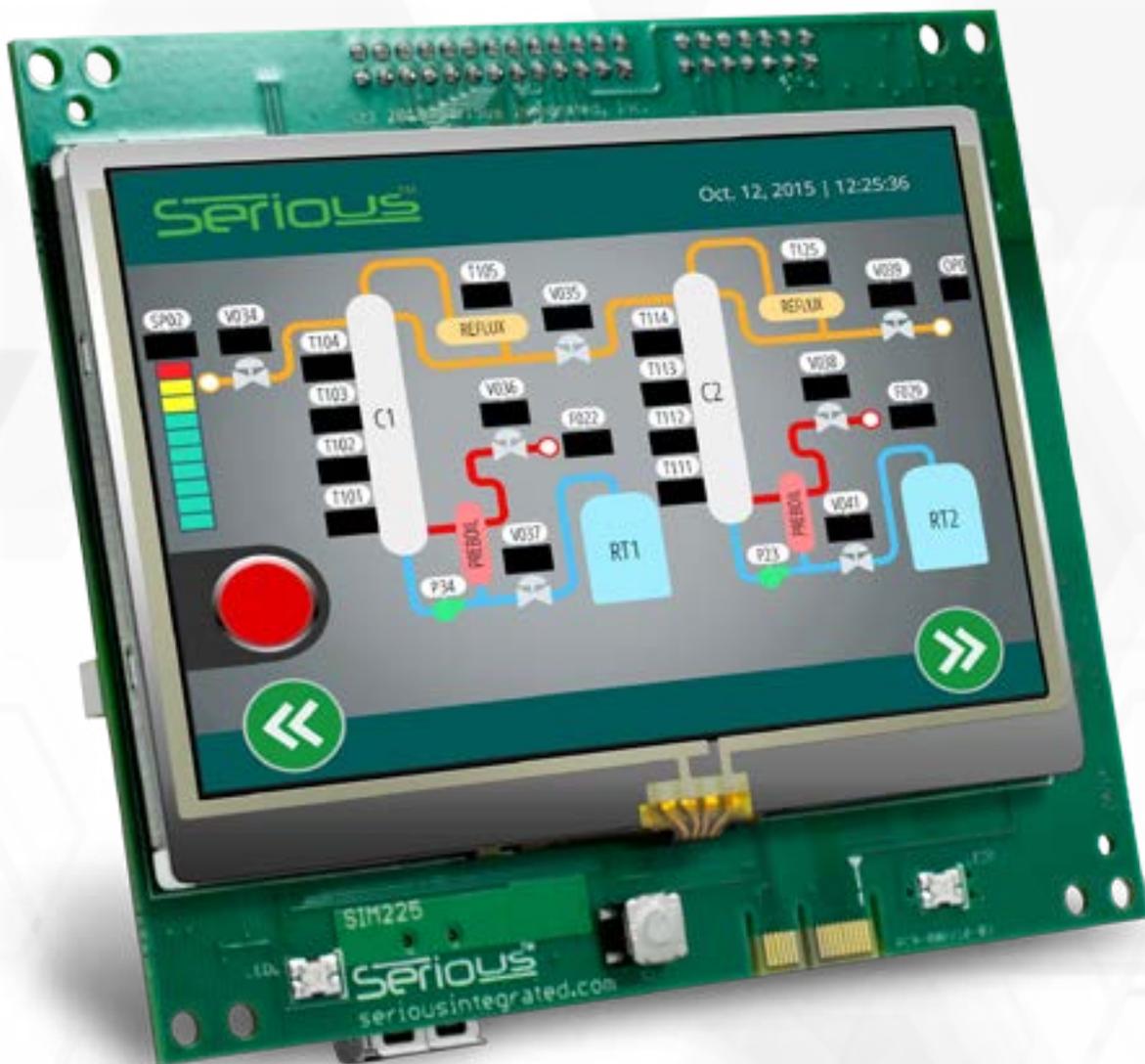


SIM225

SIM225 4.3" WQVGA
Graphic/Touch Module Family



Powered by the



Excellent Cost-Effective GUI Performance

With a bright 4.3" 480x272 LCD screen and powered by a 100MHz Renesas RX63-series MCU using direct drive technology, the SIM225 can deliver an excellent front control panel experience for your product.

Standard high speed UART and power connectivity is provided by Serious 7-pin connectors -- perfect for simple attachment to existing systems. Some variants have a 26 pin expansion connectors enabling easy custom daughter-card development for more complex connectivity.

SIM225 is an Extended Lifetime Roadmap Product and is fully supported by the SHIP rapid GUI development and deployment system, including SHIPv4 and v5.

Family Highlights

4.3" Bright, WQVGA 480x272 color TFT display

- Various touch options

100MHz 32-bit Renesas RX631/RX63N MCU

- 128KB RAM, up to 2MB FLASH
- Direct Drive LCD Connectivity

On Module Memory

- 8 or 16MB SDRAM
- 8MB or 16MB serial FLASH + 2Kbit EEPROM

Extensive I/O

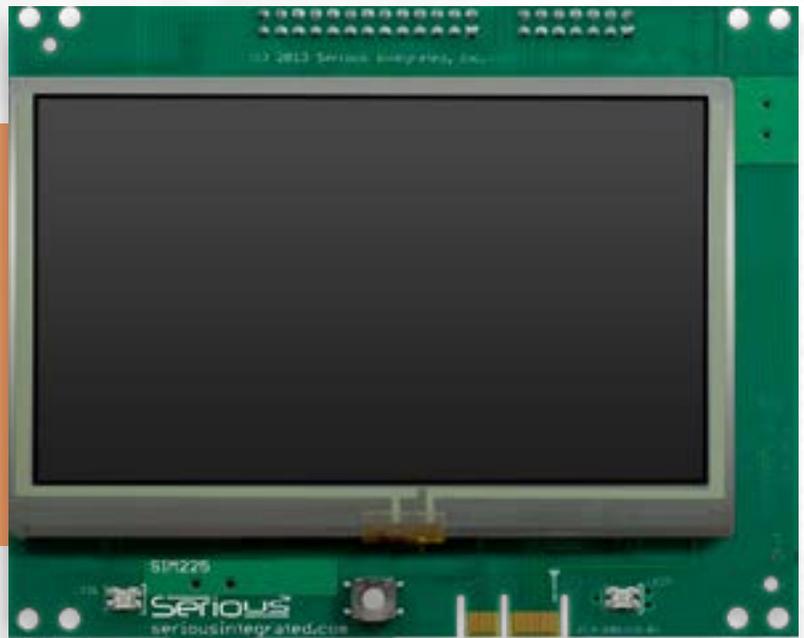
- 14-pin Renesas E1 JTAG Header
- 26-pin 0.1" I/O Header
- USB 2.0 FS Embedded Host
- USB 2.0 FS Device
- PCB Edge Connector w/JTAG & USB Device

Wide Operating Range

- -20 to 70°C operating temperature
- 3.6 to 5.50 VDC Input Power

Update your product's front panel with *Serious* modules:

- ✓ Production worthy
- ✓ Prototype friendly
- ✓ Rapid GUI development



94 mm

116 mm



Product Options

Product Options to fit your feature, performance and cost targets

Family Variants

	A00	A01	A02	A03	A04
MCU RX Family	63N	63N	63N	631	631
MCU FLASH (KB)	2048	768	768	512	512
MCU RAM (KB)	128	128	128	128	128
SDRAM/Serial FLASH (MB)	16/16	16/16	16/16	8/8	8/8
LCD Touch	R4	R4		R4	
LCD Brightness (NITs)	300	300	300	300	300
7 Pin Power/UART Connectors	●	●	●	●	●
PCB Edge Program/Test	●	●	●	●	●
USB2.0 FS device circuitry	●	●	●	●	●
USB2.0 FS device mini-B	●	●	●		
USB2.0 FS 150mA host	●	●	●		
Speaker/Amplifier	●				
Piezo Sounder		●	●		
LiPo Battery Support	●				
Battery Backed Clock	●	●	●		
PCB Temp Sensor	●	●	●		
26 Pin 0.1" I/O Expansion Header	●	●	●		
24-Pin FFC (GPIO, +5V, UART)	●	●	●		
RMII on 24-Pin FFC	●	●	●		
Front LEDs & User Button	●	●	●		

LCD Options

	R32AWL	N32AWL
Size (Diagonal Active)	4.3"	
Resolution (WxH)	480 x 272	
Touch	R4	
NITs	300+	
Backlight Life (Hour)	20K+	
Viewing Technology	Land	
Color Depth (bits)	16	
Temp Range (°C)	-20/+70	

Visit www.seriousintegrated.com/SIM225 for complete, up-to-date variants.

Building a GUI is easy when you get **SERIOUS™**

Develop your GUI using the **Serious Human Interface™ Platform** for professional results in a fraction of the time of traditional coded development.

Fast GUI Development with SHIP

Are you looking for a comprehensive PC-based WYSIWYG rapid-GUI development environment with minimal coding? Use the Serious Human Interface Platform (SHIP) to create a complete, communicating and functioning GUI in just *hours*. See seriousintegrated.com/SHIP for more details.



Serious Communications Modules

Serious offers numerous communications daughter cards for Serious Integrated Modules to help complete your hardware design in connected environments, including CAN, RS232, RS485, WiFi, Bluetooth, Ethernet and more.

[Serious Communications Modules](#) (SCM117, SCM118 and SCM208, sold separately) dock into the back of 3rd and 4th Generation SIMs, providing connectivity, 9-25VDC to 5VDC power conversion for the SCM and SIM and an optional on-board OEM programmable 32-bit MCU for custom protocol conversion between your OEM system and the SIM.

Partner Support

Serious is a Renesas Platinum Partner. Serious Integrated Modules are supported with software and services from Renesas and Serious strategic partners.



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- Mechanical Design Package (MDP)
- Technical Reference Manual (TRM)
- Schematics and more

Visit the *Serious* community at mySerious.com

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