

Product Sheet



Visualization Reference Design Kit

Visu RDK SH2A

Mastering Real Time Control and Visualization

Low latency real time control

The fast interrupt mechanism of the SH2A core allows to react within 40 nanoseconds. Use the numerous peripherals and DMA channels to facilitate automatic data acquisition and data moving to free up the CPU.

High performance core

A superscalar RISC design and the double precision FPU allow fast analysis of the captured data for immediate visual representation.

Full color graphics

Take advantage of the built in graphics controller: add a state of the art full color graphic front end to your product, enhancing the ease of use through colors, fonts and pictures.

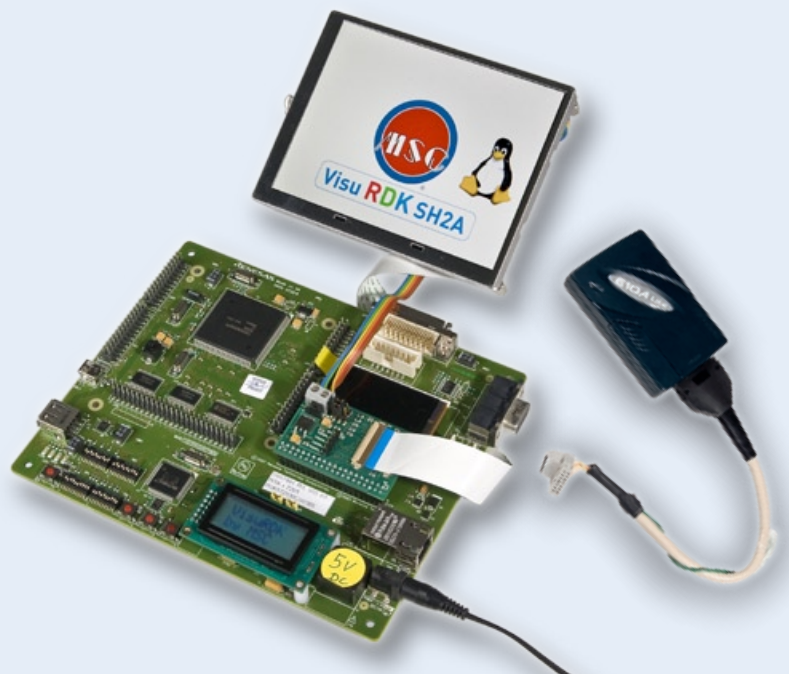
Select the software that fits your needs

The VisuRDK contains four different solutions, all including software examples: From a simple driver over free Linux up to two different professional solutions for visualization. Explore the capabilities of the software and select the right combination for your application.



Technical Highlights:

- Hitachi 5.7" VGA Color TFT Kit (TX14D14)
- Renesas SH2A RISC Core, 2x 8KB Cache
- 480 MIPS @ 200 MHz, double precision FPU
- Interrupt register banking, 50ns response time
- 16 MB SDRAM, 4 MB Flash
- LCD Controller up to 1024x1024 at 16/24 bpp
- Ethernet and dual CAN
- USB Host or Function
- 4x UART 4x I²C 2x SPI 1x SSI (sound)
- MTU timer unit for motor control (16 channels)
- A/D 8x10 bit and D/A 2x8bit
- 82 I/Os, 16 input only, 1 output only
- Including JTAG debugger
- Renesas HEW development environment





uC Linux:

Show images on the LCD, use USB memory sticks, run a webserver and telnet in with Linux on SH2A! The free operating system optimized for embedded systems with support for TCP/IP, USB host & function, flash filesystem and the fbdev VGA driver. Includes all sources and entire cross development setup for Linux.



Stand Alone Driver

VGA driver example in C source customize for any TFT LCD

Software Reference Implementations for

Visu RDK SH2A

Evaluate four different software solutions with the VisuRDK SH2A and select the one that matches your requirements.



Segger embOS and emWin:

A lean operating system for deeply embedded applications, designed to offer the benefits of a fully featured multitasking system even for hard real time applications using minimal resources. Combined with emWin the most efficient and comprehensive set of graphics libraries (GUI) available today. Optionally available: emUSB (USB device Stack) and embOS/IP (TCP/IP stack).



iniNet SpiderControl:

Design the user interface once for your embedded system and interact with the same UI remotely! The SpiderControl Editor lets you design your UI on a PC; on the target system it can be displayed on the LCD and the same Look and Feel is available on remote machines via virtually any network. A broad spectrum of remote clients can interact, it ranges from other embedded systems over WinCE-based PDAs to a regular internet browser.



Order code: VISURDK-SH2A-VGA

MSC Head Office

MSC Vertriebs GmbH · Industriestraße 16 · 76297 Stutensee · Tel. +49 7249 910-523

Sales Offices Germany

Berlin · Tel. +49 30 720089-0 · Hamburg · Tel. +49 4106 7764-0 · Hannover · Tel. +49 511 616847-0 · Braunschweig · Tel. +49 5341 2999-0 · Düsseldorf · Tel. +49 211 92593-0 · Koblenz · Tel. +49 2630 96239-11 · Wiesbaden · Tel. +49 611 97320-0 · Stuttgart · Tel. +49 711 78336-0 · München/Neufahrn · Tel. +49 8165 906-100 · Dornach · Tel. +49 89 945532-0 · Nürnberg · Tel. +49 911 43970-0 · Jena · Tel. +49 3641 6825-0

Sales Offices Europe

MSC Vertriebs GmbH/Wiener Neudorf · Tel. +43 2236 205066-0 · Velden · Tel. +43 4274 23222-17 · MSC Schweiz AG/Montreux · Tel. +41 21 9653500 · Biel/Bienne · Tel. +41 32 366 8565 · Rotkreuz · Tel. +41 41 7858200 · MSC-Vertriebs-CZ s.r.o./Blansko · Tel. +420 516 411494-15 · Prague · Tel. +420 296 580260 · MSC Iberia S.L./Barcelona · Tel. +34 935 824445 · Madrid · Tel. +34 91 721 69 51 · MSC (France) S.A.R.L./Paris · Tel. +33 1 64805555 · Strasbourg · Tel. +33 3 88651843 · Nantes · Tel. +33 2 40 522020 · Grenoble · Tel. +33 4 76 232991 · MSC (UK) LTD./Brighton · Tel. +44 1273 622446 · Chertsey · Tel. +44 1932 796335 · MSC (Scotland) LTD. · Tel. +44 1506 460555 · MSC Budapest Kft. · Tel. +36 125090-40 · MSC (Malta) LTD. · Tel. +356 21 484804 · MSC Nederland BV · Tel. +31 78 6920-150 · MSC Polska Sp. z o.o. · Tel. +48 323 3054-50 · MSC-Mibatron s.r.l./Bucharest · Tel. +40 31 1023466 · +40 21 2302530 · Rousse · Tel. +359 82 840006 · MSC Vertriebs GmbH/Istanbul · Tel. +90 216 411-2333 · MSC Representative · Tel. +45 49193854

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renesas@msc-ge.com

www.msc-ge.com