

■ Specifications For SH3

Standard specifications	
Target Processor	SH7705, SH7706, SH7709A, SH7709S, SH7727, SH7727, SH7729, SH7729R MCM with above core
Operating voltage	VDDQ: 3.3V±5% (3.145V to 3.465V)
Clock speed	Internal 133 to 200MHz (Max.)/External 66MHz (Max.) (Up to maximum clock speed of each MPU can be supported)
Memory space	All memory space made available to a user's system
Interrupts	All interrupts made available to a user's system
Endian	Little/Big
Target I/F	Either H-UDI or H-UDI/AUD connector is required. H-UDI connector: 14pin 2.54mm pitch connector Provides Go/Break/Step/Memory operation features via H-UDI interface. H-UDI/AUD connector: 36pin HIROSE DX connector Provides Go/Break/Step/Memory operation and PC trace via H-UDI/AUD connector. External Bus connector: 140 pin KEL DG01FS-140-4110 connector Optional for external bus trace, event, overlay memory and analysis features.
Software breakpoint	Point break: 1024 points Countable break: 1point
Hardware breakpoint	OCD break: 1 point (OCD break supports cache, target ROM and data access break.) Temporary break: 1point (Used for 'Goto' functionality) Forced break Step execution
Memory operation	Memory read/write in all areas

H-UDI/AUD specifications (Optional module)	
PC trace	PC branch trace for all memory areas including Cache area. 32K samples Time stamp resolution: 20ns/100ns
Event	Event point: Max. 15 points Event counter: 6 points Sequencer: 8bit Trigger condition: AND/OR conditions (Match/not match/address range/out of address range/don't care)
Hardware break	Max. 15 points by Event trigger
Performance	Min. 20ns Point to point performance with over-time/under-time condition

■ Specifications

For SH3 (Continued)

External bus trace feature (Optional module)	
Trace	*Cache trace is not supported. Trace buffer: 32K samples Multi sample (filtering) trace: Time stamp resolution: 20ns/100ns
Event	Event point: Max. 15 points Event counter: 6 points Sequencer: 8bit Trigger condition: AND/OR event condition (Match/not match/address range/out of address range/don't care) Access status: R/W/RW
Performance	Min. 20ns Point to point performance with over-time and under-time condition
External bus clock	66MHz (Max.)
Bus cycle	Normal memory bus/SDRAM bus

External ROM Emulation (Option module)	
External ROM Emulation	Emulation size: 16MB by YH630-EM016 32MB by YH630-EM032 Access time: 25ns - 50ns Bus width: 8/16/32bit Bus width: 8/16/32bit Memory attribute: ROM/RAM

Coverage (Option board is embedded with External ROM Emulation Module)	
External ROM Emulation	Coverage Size: 8MB by YH630-EXB/COV08 or 16MB by YH630-EXV/COV16 Block Size: 2MB by YH630-EXB/COV08 or 4MB by YH630-EXB/COV16 Measurement Method: Random Sampling of execution address Access Status: R/W/RW

Profile (Option module)	
Profile	Measurement Section: 1000 sections Measurement Cycle: 10 μ s Measurement Method: Random Sampling of execution address Output: Histogram

Other specifications	
Supported Host PC	Microsoft Windows 98SE, Me, XP, NT4.0, 2000
Host Interface	10BASE-T/100BASE-TX, USB
Debugger	microVIEW-PLUS □ DH630 □
Compiler	Hitachi C/C++ compiler Green Hills C/C++ compiler

Model		Description
(1)	YH630-STD	Standard module for SH-3. Ethernet module, AC adaptor .
	YH630-USB	Standard module for SH-3. USB module, USB cable, AC adapter.
(2)	YH630-JTP	H-UDI probe (14pin interface)
(3)	YH630-BTR	H-UDI/AUD trace module, H-UDI/AUD probe (36 pin I/F, 3.3v)
(4)	YH630-EXB	External Bus Trace module, Probe (3.3v)
	YH630-EXB/COV08	External Bus Trace module, Probe (3.3v), Coverage Board (8MB)
	YH630-EXB/COV16	External Bus Trace module, Probe (3.3v), Coverage Board (16MB)
(5)	YH630-EM008	External 8MB ROM emulation memory module, memory board (8MB)
	YH630-EM016	External 16MB ROM emulation memory module, memory board (16MB)
	YH630-EM032	External 32MB ROM emulation memory module, memory board (32MB)
(6)	YH630-EXB	Profile Module
(7)	YH630-FIA01	Full featured ICE Adaptor for SH7729/SH7709S
	YH630-FIA02	Full Featured ICE Adaptor for SH7705
(8)	DH630	microVIEW-PLUS debugger for SH-3

