## Comparison with the Previous Renesas Full-spec Model

	E100	Our items
	(M16C/64, M16C/64A, M16C/65)	(M16C/62P)
System configuration	E100Emulator + MCU unit	PC7501Emulator (Discontinued Product) + Emulation probe
Maximum operating clock frequency	133MHz	66.7MHz
Software break	4096 points	64 points
Hardware break	maximum 16 points	8 points
Exception event detection	Access protect Detection of skipped initialization Detection of stack access violation * Detection of stack access violation not supported for M16C/64 Group	Access protect
Multi-purpose events	Hardware break Trace Time measurement 16 events can be assigned freely to the above functions.	-
Real-time trace	Trace range: 4M cycles Trace data: Bus (Address, Data, Status), Time stamp, External trigger signal *External trigger cable is sold separately. Trace modes: Free/Full/Point & Delay (65,535 times of delay count)/Repeat(Free/Full) Can be recorded ON/OFF by events	Trace range : 256K cycles Trace data : Bus, External trigger, and Time stamp Five trace modes : Break/Before/About/After/Full
Real-time RAM monitor	16K bytes (512 bytes × 32 blocks) Data / Last access result (Read/Write/Non-access) Detection of skipped initialization	4K bytes (256 bytes × 16 blocks) Data / Last access result (Read/Write/Non-access)
Execution time measurement	Execution time between the start and the stop of the program.  Maximum/minimum/average execution time and pass count (32-bits counter) at the specified 8 segments.	Execution time between the start and the stop of the program.  Maximum/minimum/average execution time and pass count (32-bits counter) at the specified 4 segments.
Coverage	C0 coverage : 2MB area, excludes prefetch (256K bytes × 32 blocks) Data coverage :512KB area (64K bytes × 8 blocks)	8,192K bytes (256K bytes × 32 blocks)
Real-time profile	Accumulated time of execution and frequency of calling can be measured for up to 8K functions at the specified segments (128 bytes x 8 blocks).	N/A
PC Interface	USB (USB2.0 high-speed)	LAN (10BASE-T) USB (USB 1.1, Full-speed) LPT Parallel
External Trigger Input / Event Output	32 signals (Input level : CMOS or TTL, Output level : CMOS) The upper 16 bits are used exclusively for input, whereas the remaining 16 bits can be switched between input and output. *External trigger cable is sold separately.	External trigger input (MCU-dependent-voltage CMOS level × 8) or Event output (Break × 1, event × 7)