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Product Spec

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Basic Information

Product Status	Mass Production
Family	RZ
Series	RZ/A
Group	RZ/A1L

Memory

Program memory	0 KB ROMless
RAM	3072 KB
Cache Memory Remark	Primary cache:64KB(instruction32KB/data32KB), TLB128 Secondary cache:128KB(CoreLink™Level2 Cache Controller L2C-310)

CPU (Bit, Clock, DMA, External Bus etc)

CPU	Cortex-A9 (32-bit)
Max. Frequency	400 MHz
Sub-Clock (32.768 kHz)	YES
PLL	YES
Real-Time Clock (RTC)	YES
Power-On Reset	YES
Floating Point Unit	YES
DMA Remarks	DMAC x 16 ch
External Address/Data Bus	YES
External Interrupt Pins	109
I/O Ports	100

Timers	
16-bit Timers	5 ch
32-bit Timers	2 ch
Watchdog Timers	1 ch

Analog	
A/D Converters	12-bit x 8 ch

Interfaces	
CAN	2 ch
Ethernet	YES
USB Ports	2
USB Host	YES
USB Peripheral	YES
USB High-Speed Support	YES
USB Remarks	Low-speed Support (Host only)

CSIs	12 ch
SPIs	3 ch
UARTs	5 ch
I2Cs	4 ch
Serial Interface Remarks	SCIF (CSI:5ch/UART:5ch), SCI(CSI:2ch), RSPI (SPI:2ch), SPI multi (SPI:1ch), SSI (CSI:4ch), SPDIF (CSI:1ch)

Display Functions	
High-resolution display controller	VDC5: XGA (1024 x 768)

Operating Conditions	
Operating Voltage	3.0 to 3.6 V
Power Supply	VCC = 1.10 to 1.26 V, PVCC = 3.0 to 3.6 V, PLLVCC = LVDSPLLVC = 1.10 to 1.26 V, AVCC = 3.0 to 3.6 V, USBAVCC = USBUVCC = USBDVCC = 1.10 to 1.26 V, USBAPVCC = 3.0 to 3.6 V, VDAVCC = LVDSAPVCC = 3.0 to 3.6 V, USBDPVCC = 3.0 to 3.6 V, VSS = AVSS = 0 V
Operating Temperature	-40 to 85 °C (Ambient Temperature)

Remarks
Automotive, General Purpose, LCD Control, Connectivity

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Order Information

Orderable Part No.	Order	Date of PLP Termination	Production Status 	EU RoHS	RoHS-pdf (China-RoHS)
R7S721020VCBG#AC1	Contact	 Mar. 2030	Mass Production	Compliant	English



: Product participating in the Product Longevity Program. [More information on the Product Longevity Program](#)

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Package

Package	
Pins	176
Pin pitch	0.5 mm
Package Type	LFBGA
Body Size	8x8 mm ²
Package drawing	plbg0176ka_a
Mount pad drawing	fig0013e
Mounting height	1.4 mm
Mass	0.14 g
Renesas code	PLBG0176KA-A
JEITA code	P-LFBGA176-8x8-0.50

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