

# R5F70835AD80BGV

User's Manual: Hardware

The SH7080 group offers a maximum operating frequency of 80 MHz, representing a 1.6-fold improvement in performance over Renesas Electronics's current SH7144 Series. This group incorporates a built-in power supply step-down circuit, and achieves 5V single power supply or 3.3V power supply operation. This group incorporates a maximum of 512 Kbytes of on-chip flash memory capable of constant single-cycle access through the use of cutting edge flash memory technology. In addition, this group includes various peripheral functions such as DMA, a multifunction timer and a high-speed A/D converter in a single chip.

Overview

Design Support

Documentation

Sample Code

Software & Tools

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## PARAMETRICS

Parameters	R5F70835AD80BGV
<b>Package</b>	
Pin Count	112
Package Type	LFBGA
<b>Memory</b>	
Program memory	512 KB Flash memory
RAM	32 KB
<b>CPU (Bit, Clock, DMA, External Bus etc)</b>	
CPU	SH-2 (32-bit)
Max. Frequency	80 MHz
PLL	YES
Power-On Reset	YES
DMA Remarks	DMAC x 4ch, DTC
External Address/Data Bus	YES
External Interrupt Pins	9
I/O Ports	73
<b>Timers</b>	
16-bit Timers	11 ch
Watchdog Timers	1 ch
PWM Output	24
3-Phase PWM Output Function	YES
<b>Analog</b>	
A/D Converters	10-bit x 8 ch
<b>Interfaces</b>	
CSIs	4 ch
SPIs	1 ch
UARTs	4 ch
Serial Interface Remarks	SCI (CSI:3ch/UART:3ch), SCIF (CSI:1ch/UART:1ch), SSU (SPI)
<b>Operating Conditions</b>	
Operating Voltage	3 to 5.5 V
Power Supply	Vcc=3.0-3.6V/4.0-5.5V, AVcc=AVref=4.0-5.5V
Operating Temperature	-40 to 85 °C (Ambient Temperature)

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