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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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概要

变频空调作为符合环保理念而强调省电化这一重要主题的同时，还被要求具有能配合住宅环境的小型化压缩机。

瑞萨可以实现这些功能，来创造出更加舒适的生活环境。具体来说，我们拥有空调控制用的丰富产品线。室外机方面，有SH/Tiny、M16C/Tiny，可实现适合变频器控制的无传感器无刷电机控制，室内机方面有R8C族等，而遥控器方面有LCD MCU M3455A、M38D2，可以提供满足客户需求的最佳解决方案。

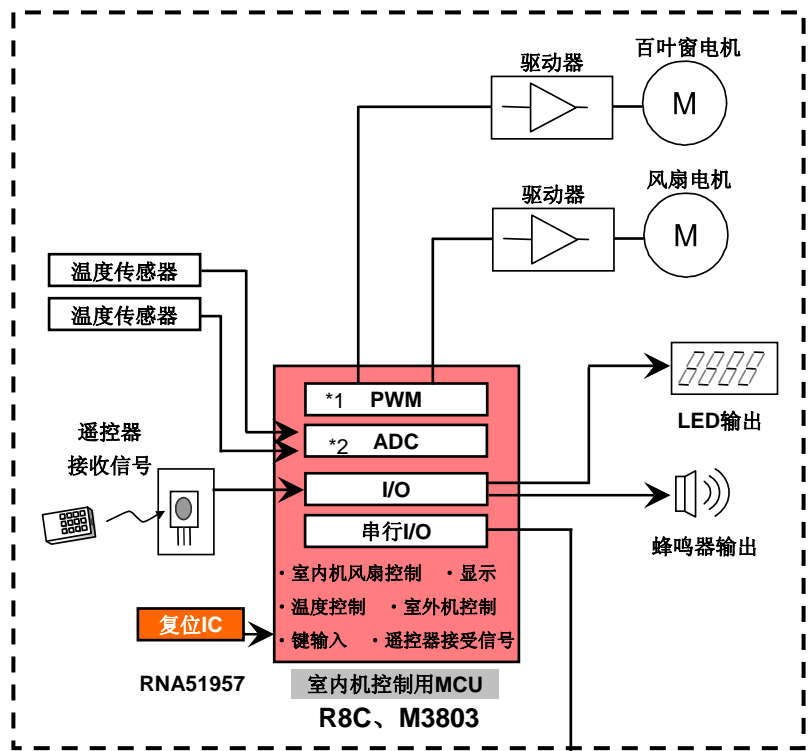
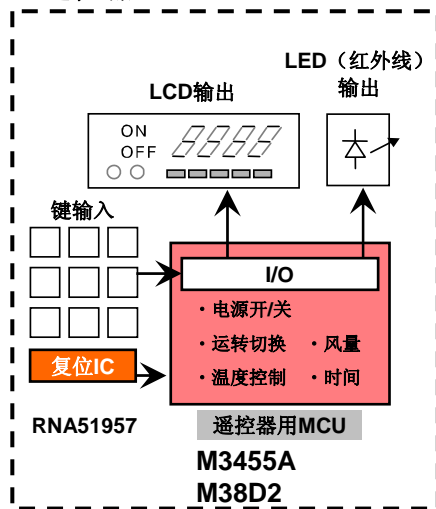
另外，关于电气化产品的输入电流内含有高谐波成分有被强制的趋势，因此瑞萨还提供能有效抑制高谐波的PFC电源用IC（功率因数控制IC）。

系统框图（室内机/遥控器）

2009年12月最新信息

变频空调室内机本体

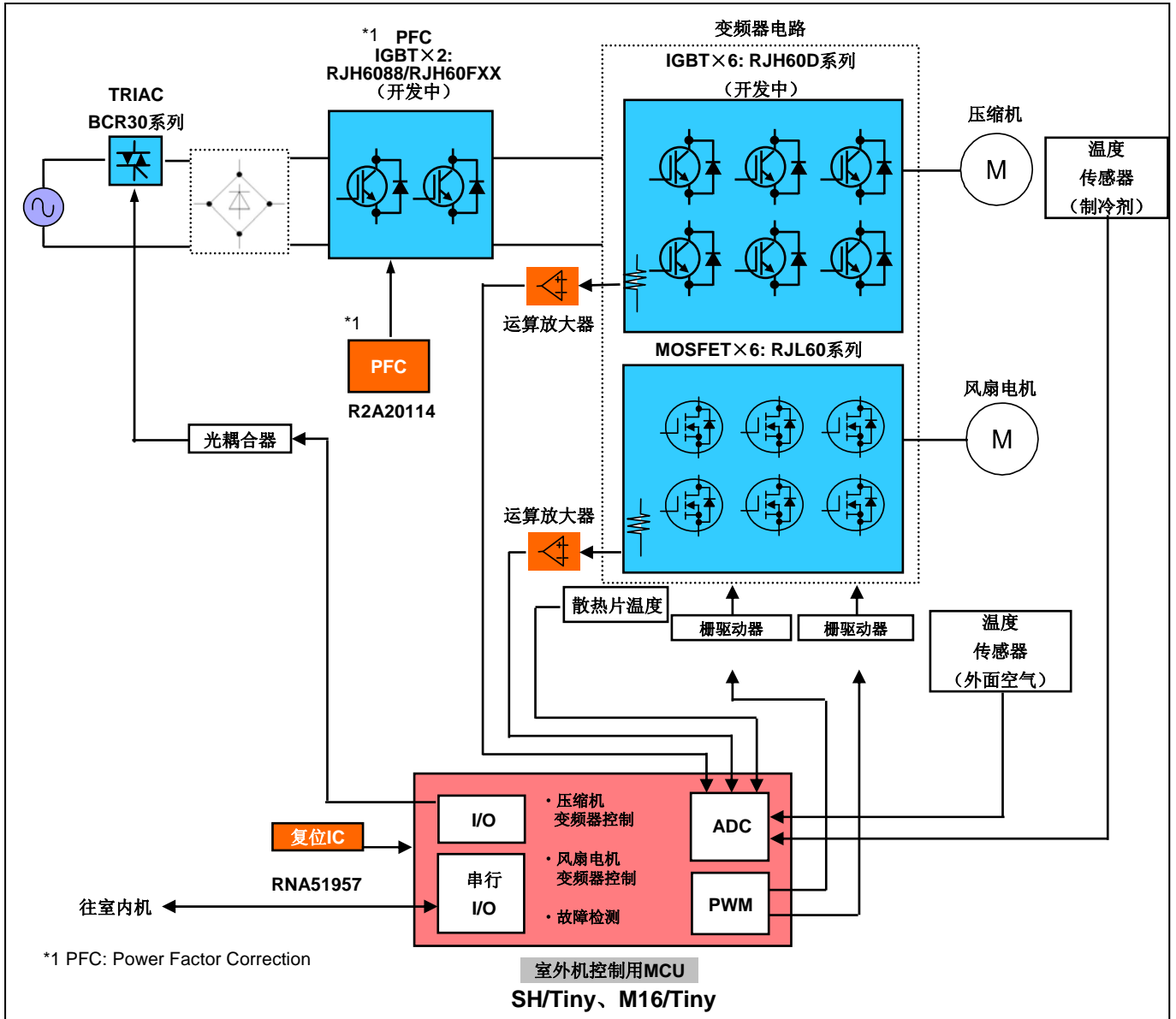
遥控器



*1 PWM:Pulse Width Modulation
*2 ADC:Analog to Digital Converter

系统框图 (室外机)

2009年12月最新信息



所推荐的瑞萨元件

最新信息

Block	半导体	推荐产品名	特点等
遥控器	MCU	38D2群	LCD驱动器、低功耗
		455A群	LCD驱动器、低功耗、小型PKG
室内单元	MCU	R8C系列	定时器、5V工作、小型PKG
		3803H群, 3803L群	定时器、5V工作
	EEPROM	R1EX24xxxA系列	IIC-bus
		R1EX25xxxA系列	SPI-bus
室外单元	MCU	SH/Tiny系列	三相PWM定时器、5V工作、A/D强化
		M16C/Tiny系列	三相PWM定时器、5V工作、小型PKG
	PFC(IGBT)	RJH608xBDPK*, RJH60F系列	最适合有源过滤器方式、高速开关
		RJP60D0DPM*	最适合部分开关方式、低VCE(sat)、绝缘外形开发中
	PFC(IC)	R2A20114	连续模式 交错
	EEPROM	R1EX24xxxA系列	IIC-bus
R1EX25xxxA系列		SPI-bus	
通用/浪涌吸收 电路保护等	齐纳二极管	RKZxxKG系列	2引脚表面贴装 最适合高ESD时浪涌吸收用
		HZMxNB系列	3引脚(内有一个元件)表面贴装 最适合高ESD时浪涌吸收用
		HZ/HZS系列	2引脚玻璃插入式外形 最适合高ESD时浪涌吸收用
	开关二极管	HSU119, HSC119	2 譜門・贴装
		HSM2838C, HSM123	3 譜・娃澀器單 図・門・贴装
		1S2076, 1SS119	2引脚玻璃插入式外形
	肖特基势垒二极管	HRC0103C	2引脚表面贴装(低漏电流) 最适合低 t_r 时电路保护用
		HRB0502A	3 譜門・贴装(低VF・
		HRV103B, RKR104BKH	2引脚小型表面贴装($I_o=1A$) 最适合低 t_r 时电路保护用
	分立器件 (变频器部分)	IGBT	RJH60D系列
MOSFET		RJL60系列	寄生Di高速trr型
MCU外围	复位IC	RNA51957	检测电压可变

*: 开发中

相关应用手册/参考代码

名称	文档编号
SH7080/SH7146/SH7125/SH7200系列应用手册 3相互补PWM输出	REG05B0051-0100
R2A20114应用手册	-
功率MOS FET应用手册	REJ05G0001-0200

相关评估板

名称	型号名
R2A20114系列评估板	-

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