

W&S – Real Time Clock Product Table

Features	New		Existing				
	EM3027I	EM3027S	V3020	V3021	V3022	V3023	V3025
Supply Voltage	1.3 to 5.5V	1.3 to 5.5V	1.2 to 5.5V	1.2 to 5.5V	2.0 to 5.5V	2.0 to 5.5V	2.0 to 5.5V
Standby Current, 25°C (Over temp)	350 nA	350 nA	0.4 (0.6) μ A	0.4 (0.6) μ A	1.2 (10) μ A	1.2 (10) μ A	1.2 (10) μ A
Operating Temperature Range	-40°C to 125°C	-40°C to 125°C	-40°C to 125°C	-40°C to 125°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Embedded Crystal					●	●	●
Battery Switch Over	●	●					●
On chip frequency trimming	●	●			●	●	●
Temperature Sensor Readable	●	●					
On chip temperature compensation control	●	●					
Trickle charge	●	●					
Timer, Alarm, Pulse Interrupts (Clock Output)	1 IRQ	1 IRQ	●	●	●	●	●
Interface	I2C	SPI	1-bit serial	1-bit serial	8-bit parallel	8-bit parallel	8-bit parallel
User RAM and/or E ² PROM	E ² PROM 2 bytes RAM 8 Bytes	E ² PROM 2 bytes RAM 8 Bytes				RAM 16 bytes	RAM 16 bytes
Package	SO-8 TSSOP8	TSSOP14	SO-8 TSSOP-8	SO-8 DIP-8	SO-28	SO-28	SO-28

General Features:

- ▶ Oscillator working with 32kHz crystal
- ▶ Digital trimming for temperature compensation
- ▶ No external component needed
- ▶ Sleep mode capability
- ▶ BCD output of second, minute, hour, day, date, week number, month and year
- ▶ Leap year correction
- ▶ Low power consumption