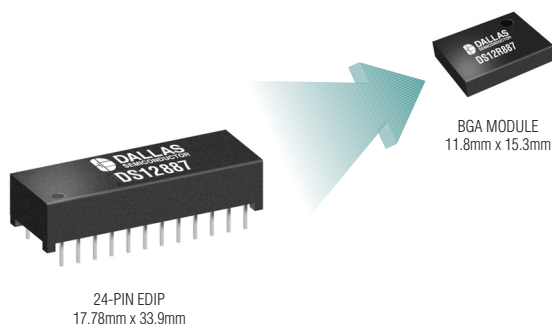


WORLD'S FIRST SURFACE-MOUNTABLE RTC MODULE

Contains RTC, Battery, and Crystal in a 11.8mm x 15.3mm Footprint

The DS12R887 is a complete timekeeping solution containing a real-time clock, rechargeable battery, and crystal in a single surface-mountable module. The DS12R887 replaces the old encapsulated DIP RTC modules that required either a wave-solder process or a socket to handle the through-hole construction. Additionally, the new module uses only 30% of the older module's footprint.

The DS12R887 handles all the requirements of the on-board rechargeable battery, including UL-approved isolation, charging, and power switching when system power is removed. As no battery management is required, the DS12R887 is functionally identical to the DS12887. No firmware changes are required to migrate DS12887 systems to the DS12R887. In addition, the minimum cycle time on the DS12R887 has been reduced to 180ns for the +5V version. The DS12R887 comes in a +3.3V version and operates over the -45°C to +85°C temperature range.



- ◆ Functionally Compatible with DS12887
- ◆ Capable of IR Reflow
- ◆ +5.0V or +3.3V Versions
- ◆ Automatic Power Switching
- ◆ -40°C to +85°C Temperature Range

Part	IR Reflow	Temperature Range (°C)	Voltage (V)	Pin-Package	Price† (\$)
DS12R887-33	Yes	-40 to +85	+3.3	48-Ball BGA	4.33
DS12R887-5	Yes	-40 to +85	+5.0	48-Ball BGA	4.33

†1000-up recommended resale. Price provided is for design guidance and is FOB USA. International prices will differ due to local duties, taxes, and exchange rates. Not all packages are offered in 1k increments, and some may require minimum order quantities.



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