

GENERAL DESCRIPTION

The DS9034PCX PowerCap[®] is designed to be a lithium power source for nonvolatile timekeeping RAMs in Dallas Semiconductor's directly surface-mountable PowerCap Module (PCM) package. After a PowerCap module board has been soldered in place and cleaned, the DS9034PCX PowerCap is placed on top of the PCM board to form a complete PowerCap module package. The PowerCap is keyed to prevent incorrect attachment.

The DS9034PCX can be easily removed by inserting a regular screwdriver into a detachment feature and prying gently outward and upward to release the PowerCap from the PowerCap module board.

PowerCap is a registered trademark of Dallas Semiconductor.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature Range: -40°C to +85°C

Stresses beyond those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated in the operational sections of the specifications is not implied. Exposure to the absolute maximum rating conditions for extended periods may affect device.

BATTERY CHARACTERISTICS

Nominal Voltage: 3V
Nominal Capacity: 130mAh
Chemistry: Li(CF)x

CRYSTAL CHARACTERISTICS

Nominal Frequency: 32.768kHz
Load Capacitance: 6pF

ORDERING INFORMATION

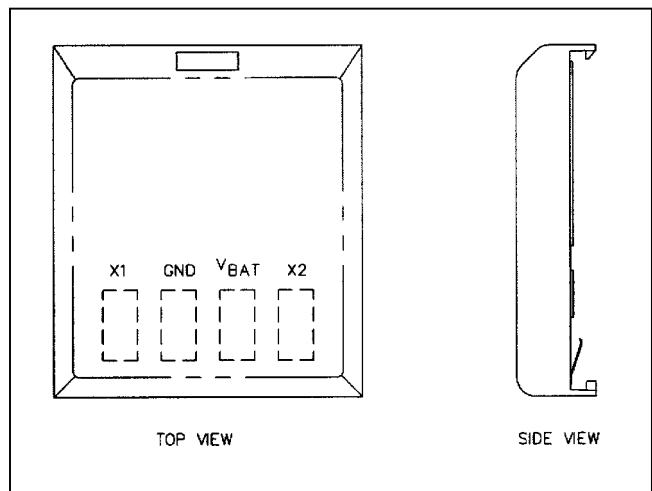
| PART | TEMP RANGE | PIN-PACKAGE |
|-------------|----------------|-------------|
| DS9034-PCX | 0°C to +70°C | PCM |
| DS9034I-PCX | -40°C to +85°C | PCM |

FEATURES

- Provides 10 Years of Battery Backup Power for Nonvolatile Timekeeping RAMs in the PowerCap Module Package (PCM)
- Snaps Directly Onto Surface-Mounted PowerCap Module Boards
- Detachment Feature Allows Easy Removal
- Compatible with these 34-Pin PowerCap Module Boards:

| | |
|-------------|---------------|
| DS1386P | DS1543P/YP/WP |
| DS1486P | DS1553P/YP/WP |
| DS1643P | DS1554P/YP/WP |
| DS1644P | DS1556P/YP/WP |
| DS1646P | DS1557P/YP/WP |
| DS1647P | DS1744P/YP/WP |
| DS1743P/WP | DS1746P/YP/WP |
| DS1251YP/WP | DS1747P/YP/WP |
| DS1248YP/WP | |
| DS1244YP/WP | |

PACKAGE INFORMATION

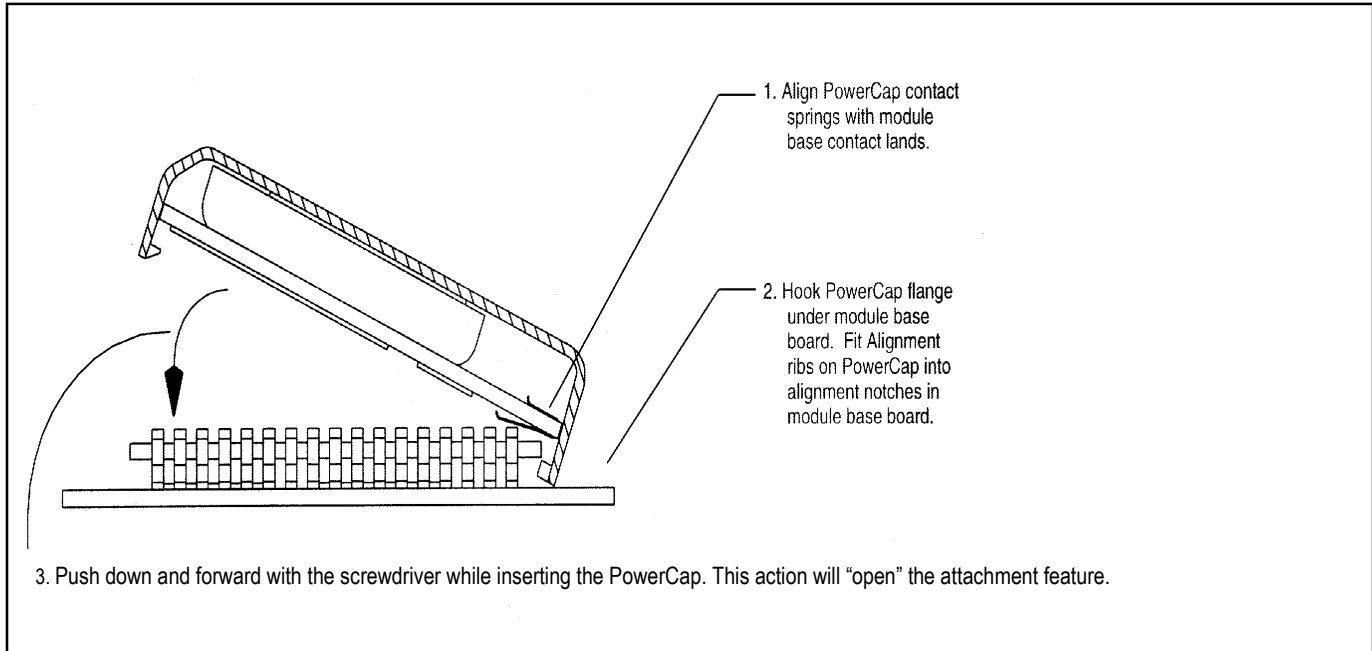


PIN DESCRIPTION

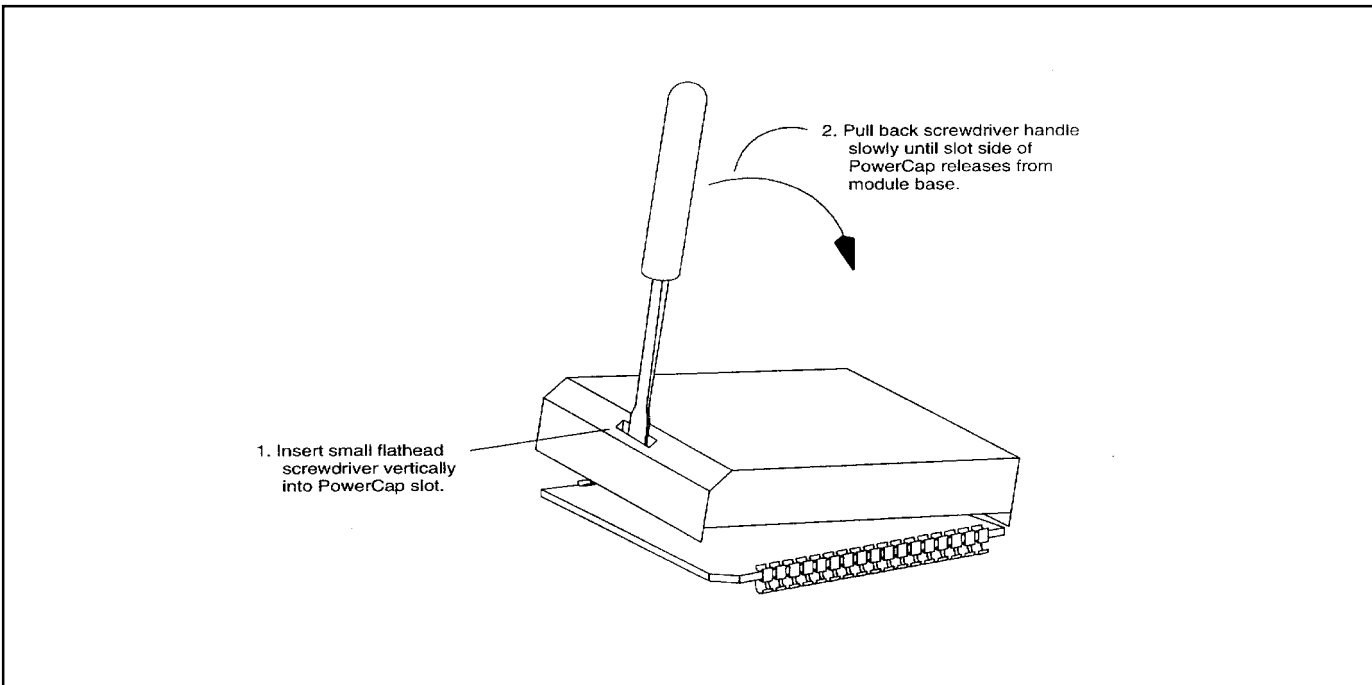
| NAME | FUNCTION |
|------------------|-------------------------------|
| X1, X2 | 32.768kHz Crystal Connections |
| V _{BAT} | +3V Battery Output |
| GND | Ground |

Note: Some revisions of this device may incorporate deviations from published specifications known as errata. Multiple revisions of any device may be simultaneously available through various sales channels. For information about device errata, click here: www.maxim-ic.com/errata.

PowerCap ATTACHMENT AND REMOVAL

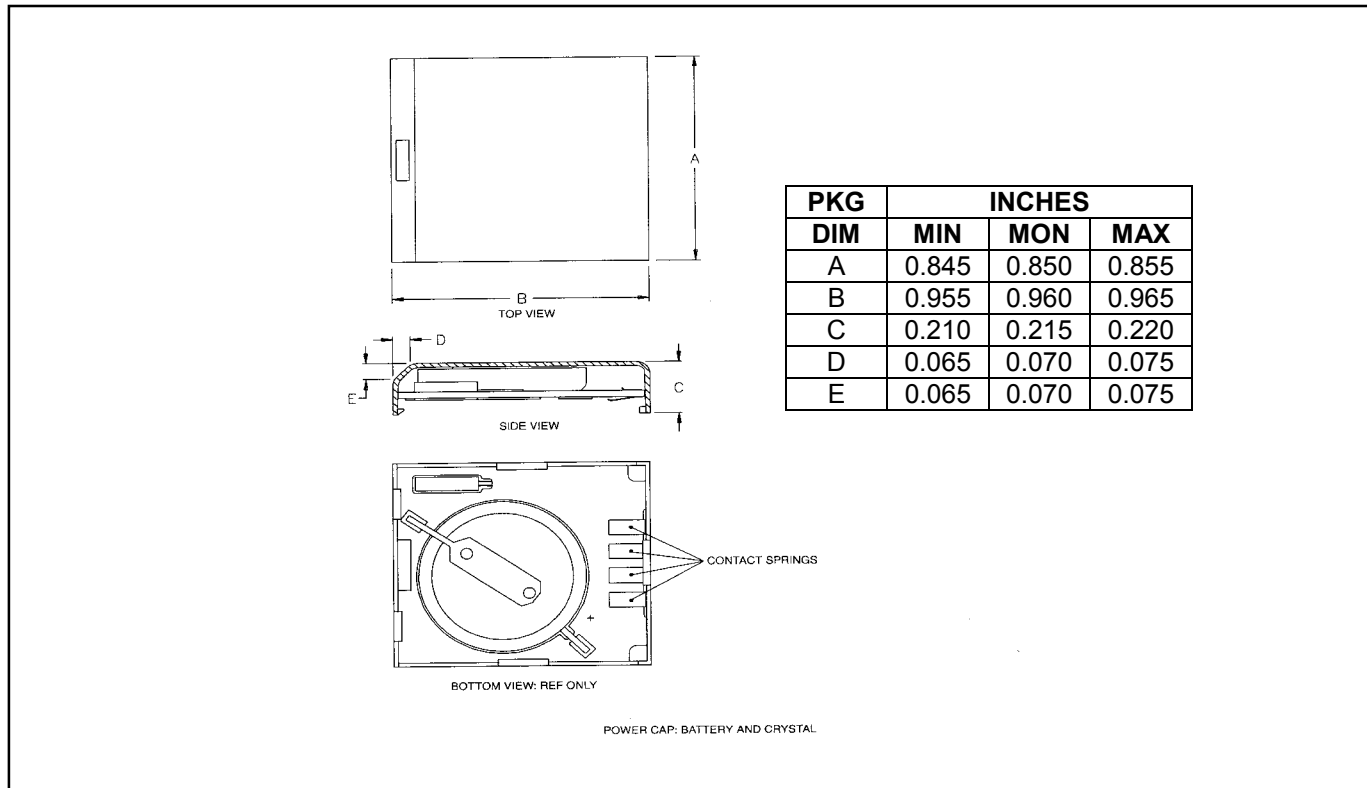


PowerCap REMOVAL



PACKAGE INFORMATION

(The package drawing(s) in this data sheet may not reflect the most current specifications. For the latest package outline information, go to www.maxim-ic.com/DallasPackInfo.)



ATTENTION: BATTERY COMPONENT

The DS9034PCX contains a lithium battery. Do not short, ground, or apply external voltages to the electrical portions of this device. Do not expose to temperatures over 85°C. Do not subject this device to any type of cleaning process. Store only in nonconductive containers. Failure to observe these precautions may result in battery discharge or decreased battery life.

Maxim/Dallas Semiconductor cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a Maxim/Dallas Semiconductor product. No circuit patent licenses are implied. Maxim/Dallas Semiconductor reserves the right to change the circuitry and specifications without notice at any time.

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