Application Note 4
DS1213, DS1216 SmartSocket/SmartWatch Options

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SMARTSOCKET/SMARTWATCH OPTIONS

The DS1213 SmartSocket and DS1216 SmartWatch product families are designed to accept several user modifications. Please review the DS1213 and DS1216 data sheets for normal operation before modification.

DS1213 SMARTSOCKET OPTIONS
(Reference Figure 1)

Option 1: Power Supply Tolerance

The standard DS1213 socket products are manufactured such that power-fail detection occurs between 4.75 volts and 4.50 volts, giving a 5% supply operating range. This range can be changed to a 10% supply with power-fail detection occurring between 4.50 volts and 4.25 volts. Follow the procedure below:

- cut metal trace labeled "TOL"
- short together metal tabs labeled "T"

Option 2: Density Upgrade

This option applies to the DS1213B and DS1213D SmartSockets only. The DS1213B can be upgraded from 8k x 8 to 32k x 8 memory and the DS1213D can be upgraded from 128k x 8 to 512k x 8 memory by performing the following:

- cut metal traces identified by a hash mark labeled "U"
- short together square metal pads labeled "G"

DS1216 SMARTWATCH OPTIONS
(Reference Figure 2)

Option 1: RESET Disconnect

All DS1216 SmartWatch sockets are manufactured such that the RST signal to the real-time clock is located at pin 1 of the socket. If for a given application the RESET signal is not required, or not desired, this signal can be permanently disconnected as follows:
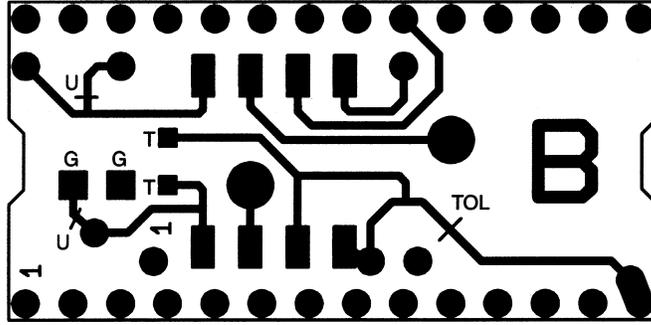
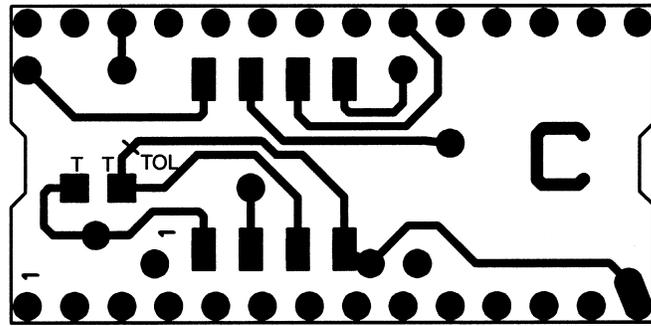- cut metal trace labeled "RES"

Option 2: Density Upgrade

This option applies to the DS1216B and DS1216D SmartWatch sockets only. As with the DS1213B and DS1213D, the DS1216B and DS1216D can be upgraded from 8k x 8 to 32k x 8 memory and 128k x 8 to 512k x 8 respectively as follows:

- cut metal traces identified by a hash mark labeled "U"
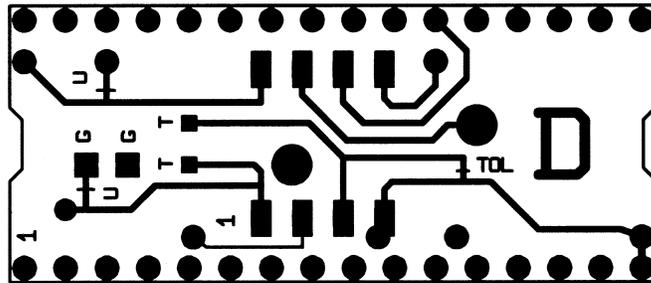- short together square metal pads labeled "G"

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DS1213 SMARTSOCKET FAMILY Figure 1
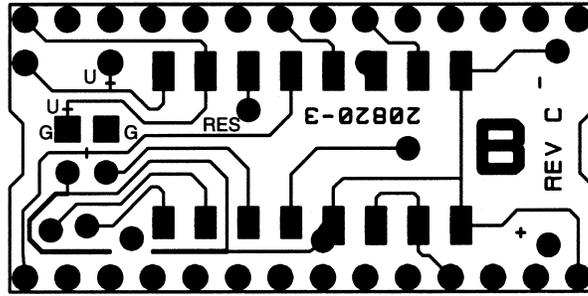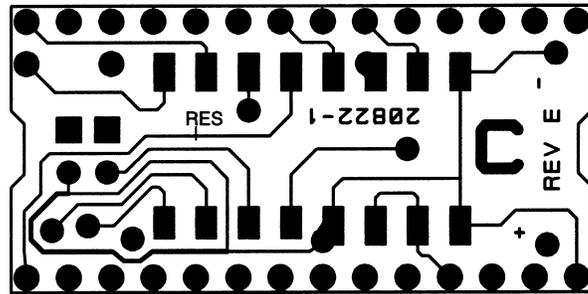

DS1213B

DS1213C

DS1213D

DS1216 SMARTWATCH FAMILY Figure 2
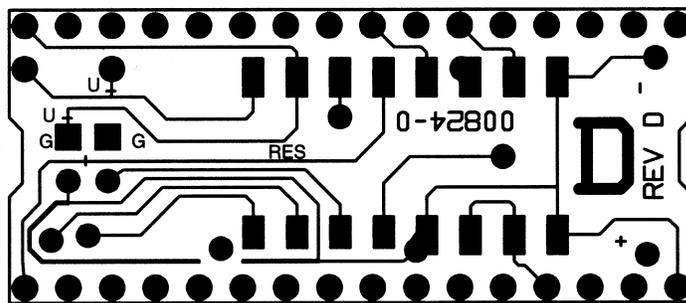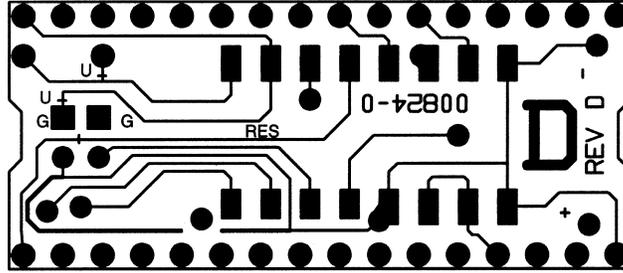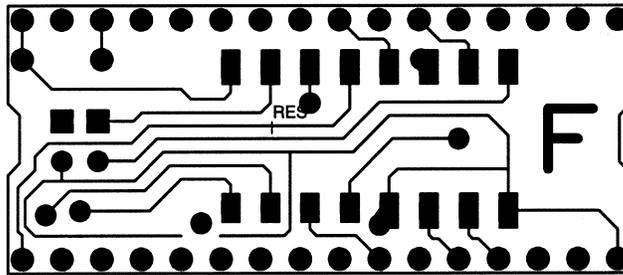

DS1216B

DS1216C

DS1216D

DS1216 SMARTWATCH FAMILY Figure 2 (cont'd)

DS1216D

DS1216F