



**NOTES:**

High frequency performance is dependent on proper RF connector assembly. The following factors must be controlled for optimum performance:

1. The connector should fit tightly against the circuit board edge, avoid gaps.
2. The center contact pin must lie parallel and flat against the circuit board, avoid gaps.
3. The contact pin should be centered on the circuit board signal trace.
4. Use a minimal amount of solder between the contact pin and signal trace. Do not allow excess solder to build up or flow down the trace.
5. Clean all excess flux and other residue from launch area, especially between the trace and ground.

6. USE 101-0515-01 PCB.

7. CAUTION:  
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD)

8. ALL TRANSMISSION LINES ARE:  
15 MIL WIDTH, 10MIL GAPS, 8 MIL CORE DIELECTRIC  
ROGERS 4003 ON TOP LAYER AND FR4 ON INNER AND BOTTOM LAYERS.

|                                                                                                                                                                                               |  |              |         |                                                                                             |           |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------|---------|---------------------------------------------------------------------------------------------|-----------|--------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES ARE IN INCHES AND APPLY TO THE FINISHED PART TOLERANCES ARE:<br>FRACTIONS DECIMALS<br>± .XX ± .01<br>.XXX ± .005<br>DO NOT SCALE DRAWING |  | CONTRACT NO. |         | <b>PEREGRINE SEMICONDUCTOR</b><br>9380 Carroll Park Drive, Suite 100<br>San Diego, CA 92121 |           |              |
|                                                                                                                                                                                               |  | DRAWN        | DATE    |                                                                                             |           |              |
| MATERIAL                                                                                                                                                                                      |  | JEFF LUNDY   | 6-28-10 | <b>SCHEMATIC, PE42540 EVK PCB</b>                                                           |           |              |
| FINISH                                                                                                                                                                                        |  | ENGINEER     | DATE    |                                                                                             |           |              |
| SIMILAR TO                                                                                                                                                                                    |  | MATT ALLISON | 6-28-10 | SIZE                                                                                        | CAGE CODE | DWG NO.      |
| MARKING SYMBOL                                                                                                                                                                                |  | CHECKED      | DATE    | 102-0612                                                                                    |           | REV          |
|                                                                                                                                                                                               |  | APPROVED     | DATE    |                                                                                             |           | 02           |
|                                                                                                                                                                                               |  | ISSUED       | DATE    | SCALE:                                                                                      | DATE      | Sheet 1 of 1 |

| Item | Qty | Reference | Value            | Description                                    | Peregrine P/N | Manufacturer              | Manufacturer Part Number | Distributor | Distributor Part Number | Data Sheet                                                                                                                                                                                    | Notes                     |
|------|-----|-----------|------------------|------------------------------------------------|---------------|---------------------------|--------------------------|-------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 1    | 2   | C5-6      | 0.1uF            | Capacitor, Ceramic 0.1uF 16V X5R 0402          |               | Panasonic - ECG           | ECJ-0EB1C104K            | Digi-Key    | PCC2363CT-ND            | <a href="http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=PCC2363CT-ND">http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=PCC2363CT-ND</a>             |                           |
| 2    | 4   | C1-4      | 22pF             | Capacitor, Ceramic, 22PF, 50V, 0402            |               | Panasonic - ECG           | ECJ-0EC1H220J            | Digi-Key    | PCC220CQTR-ND           | <a href="http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=PCC220CQTR-ND">http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=PCC220CQTR-ND</a>           |                           |
| 3    | 1   | J8        | HEADER 14        |                                                |               | Sullins Electronics Corp. | PZC36DABN                | Digi-Key    | S2021-36-ND             | <a href="http://rocky.digikey.com/WebLib/Sullins/Web%20Data/PZC36DABN.pdf">http://rocky.digikey.com/WebLib/Sullins/Web%20Data/PZC36DABN.pdf</a>                                               | Cut to 14 Pin Header .100 |
| 4    | 1   | U1        | PE42540          | SOCKET, MICROTTEST, 3924, 5X5, 32L FOR PE42540 |               |                           |                          | PEREGRINE   | PE42540                 |                                                                                                                                                                                               |                           |
| 5    | 4   | R3-6      | 0 OHM            | Resistor, ZERO OHM ,1/10W, 5%, 0402            |               | Panasonic - ECG           | ERJ-2GE0R00X             | Digi-Key    | P0.0JTR-ND              | <a href="http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=P0.0JCT-ND">http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=P0.0JCT-ND</a>                 |                           |
| 6    | 2   | R1-2      | 1M               | Resistor, 1.00M OHM 1/16W 1% 0402 SMD          |               | VISHAY DALE               | CRCW04021M00FKED         | Digi-Key    | 541-1.00MLTR-ND         | <a href="http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=541-1.00MLTR-ND">http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&amp;name=541-1.00MLTR-ND</a>       |                           |
| 7    | 7   | J1-7      | 142-0761-881/891 | CONN, JACK, SMA, 50 OHMS, PC MOUNT             |               | Emerson Network Power     | 142-0761-881/891         | Digi-Key    | J801-ND                 | <a href="http://search.digikey.com/scripts/DkSearch/dksus.dll?vendor=0&amp;keywords=142-0761-881">http://search.digikey.com/scripts/DkSearch/dksus.dll?vendor=0&amp;keywords=142-0761-881</a> |                           |
| 8    | 1   |           |                  | PCB, PE42540 EVK                               | 101-0515-01   |                           |                          |             |                         |                                                                                                                                                                                               |                           |