

| OWNER     |            | COMPANY NAME         |      |
|-----------|------------|----------------------|------|
|           |            | (c)BRIM BROTHERS LTD |      |
| APPROVALS | DATE       | DWG                  | REV. |
| DRAWN     | 12/03/2014 | POD                  | 1.0  |
|           | 12/03/2014 | SHEET                |      |
| CHECKED   |            | <@SHEET_NAME@>       |      |
| ISSUED    |            | PAGE 1               | of 3 |

## Charging Operation

If pods battery is dead (or low) and it is plugged into a powered charger the FÉT parasitic diode allows enough voltage after diode drop to power processor. Once powered up the micro detects the external supply through IN\_BAT\_MON as it is monitored regularly and switches on the FET using OUT\_ANA/BASE\_PWR which allows full battery voltage charge.

## Base Operation

EX\_SERIAL\_TX\_RX

If pod battery is good no current can flow as FET is switched off due to pull up resistor on gate. When pod is plugged into base the serial TX line from base has a pull down resistor which pod micro detects and switches on the FET using low signal on OUT\_ANA/BASE\_PWR. This allows current to flow from pod allowing it to power up and

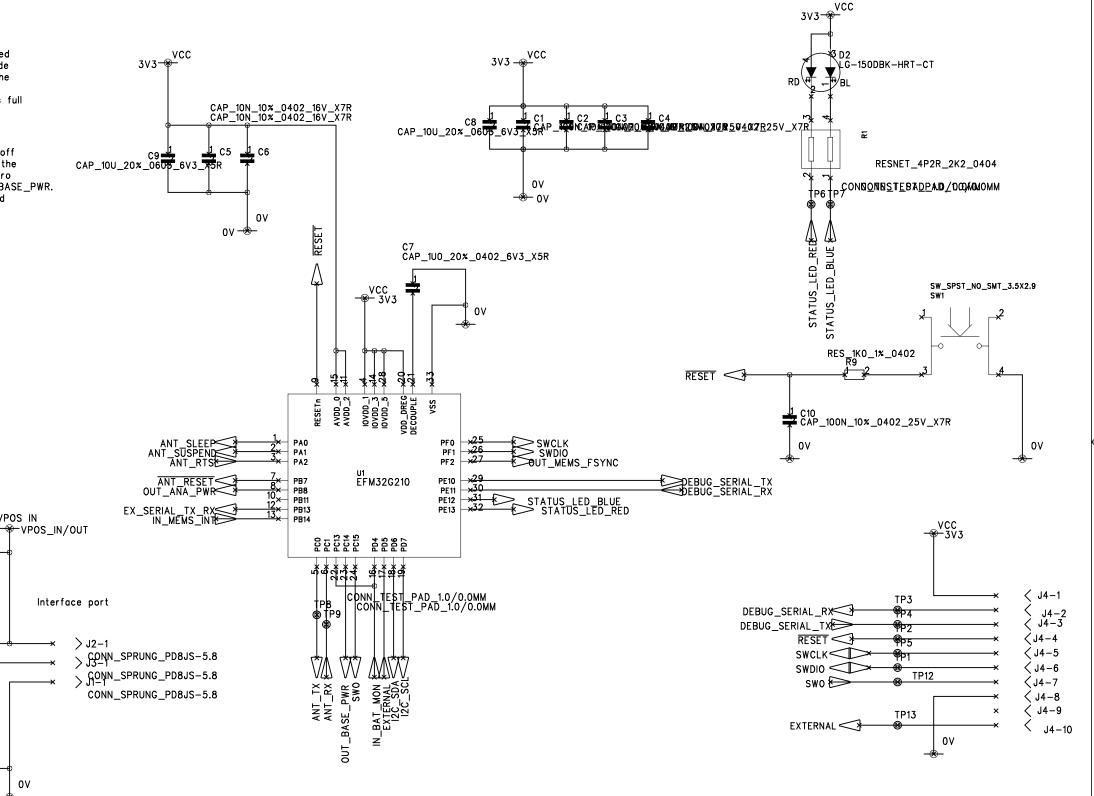
VPOS IN

0٧

100n

PESD5V0S2UQ

0٧



| OWNER     |            | COMPANY NAME         |      |
|-----------|------------|----------------------|------|
|           |            | (c)BRIM BROTHERS LTD |      |
| APPROVALS | DATE       | DWG                  | REV. |
| DRAWN     | 27/03/2014 | POD                  | 1.0  |
|           | 27/03/2014 | SHEET                |      |
| CHECKED   |            | <@SHEET_NAME@>       |      |
| ISSUED    |            | PAGE 2               | of 3 |

