## Title and Revision History

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| May 18, 2012  | 245-01951-050   |          | 1. Add U1 FLASH SO32-300MIL PCB FOOTPRINT, DLE Flash_WP on FLASH SOC 300MIL  
2. DLE X11 300MIL, CHANGE NET Flash_WP TO GND10A |
| May 20, 2012  | 245-01951-060   |          | 1. Rename USB_LED silkscreen to ROUTER_LED |
2. JTAG 2x5pins change to 2x5pins, add 9pin-lead, 10pin-lead, Del JUMP START net and switch. |
| Mar 20, 2013  | 245-01951-080   |          | 1. Change LED2 connect to 3.3V  
2. Add U2 74HCT125D connect to RX8010 and reset ROUTER net, add X199, X200 100N  
3. Change LIST:  
a) Change VR1 from 1117-33v to 1117-50v, remove VDD33_LDO, Add 5V_LDO  
b) Change 2.54mil connect to U023, 2.54mil connect to 5V_LDO  
c) Remove D0 in USB part, connect 5V direct to ESD_5V  
d) Add C178, Change C31 to NS.  
e) Add CW1 and CW2 for production test (add R4, R5)  
f) Del C130, Add C50, C51, Del C148, Add C52, C55, Del C158, Add C62, C63; Del C146, Add C60, C61  
g) Add D2, D3, D4, D5, D6, D7 for Ethernet ESD protection. |
| Mar 28, 2013  | 245-01951-090   |          | 1. C127, C50, C51, C52, C59, C62, C63, C60, C41 change the correct symbol (DNL [noload] D4, C76, C77, C78, C81, C82, C79, C80  
2. D2 has not been removed. Connect 5V directly to ESD_5V. DEL C31 and load C178 with a 1206 10UF ceramic cap. |
Note: Pin name is 0.99 (20100316)

CK_P, DQS_0, DQS1 short together if use SDRAM.
Memory bus clock speed and voltage:
SDRAM: 166MHz, 3.0V
DDR1: 200MHz, 2.5V
DDR2: 200MHz, 1.8V
L15, L16 recommend using low DCR
Psat power current 150mA-180mA

R76 & R77 share 1 pad
R80 & R81 share 1 pad

L15, L16 recommend using low DCR
Psat power current 150mA-180mA
Trade-offs:

Nets name LED0, LED1, LED2, LED3, LED4, LED7 are also for Boot-strap during power on.
To avoid wrong voltage applied on the IO pin from LED, these GPIOs should be source current only.
The rest LEDs are using sink current mode to reduce the Hornet internal 2.5V LDO loading (thermal).

LEDs are 0805 SMT type because of plastic optical guide.
If DCin=5V then VR155=0603/0 Ohm and U5,C62,C63,R147,C147,C144, L14,C143,R210,R148,R149,C60,C61=NL.