

# ARESCOM AG2000S/AG2000

## Motorola MPC 850 CPU SINGLE BOARD

### WLAN AP + 10BTWLAN

### AG2000S WITH 4 PORTS 10/100BT

### AG2000 WITH 10BT LAN

### PCB P/N: 109000000229

#### MPC 850 SAR PIN ASSIGMENTS:

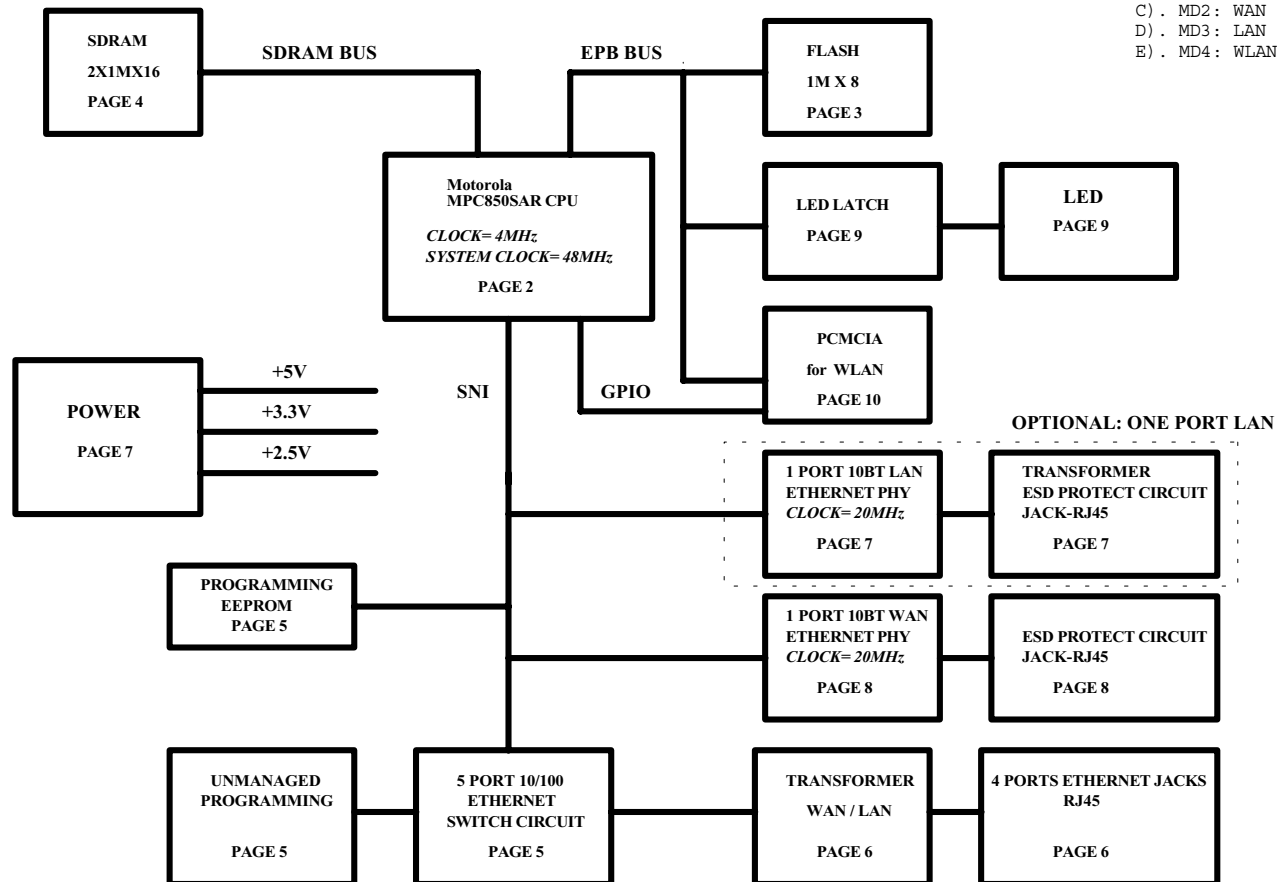
##### 1. CHIP SELECT ASSIGNMENTS:

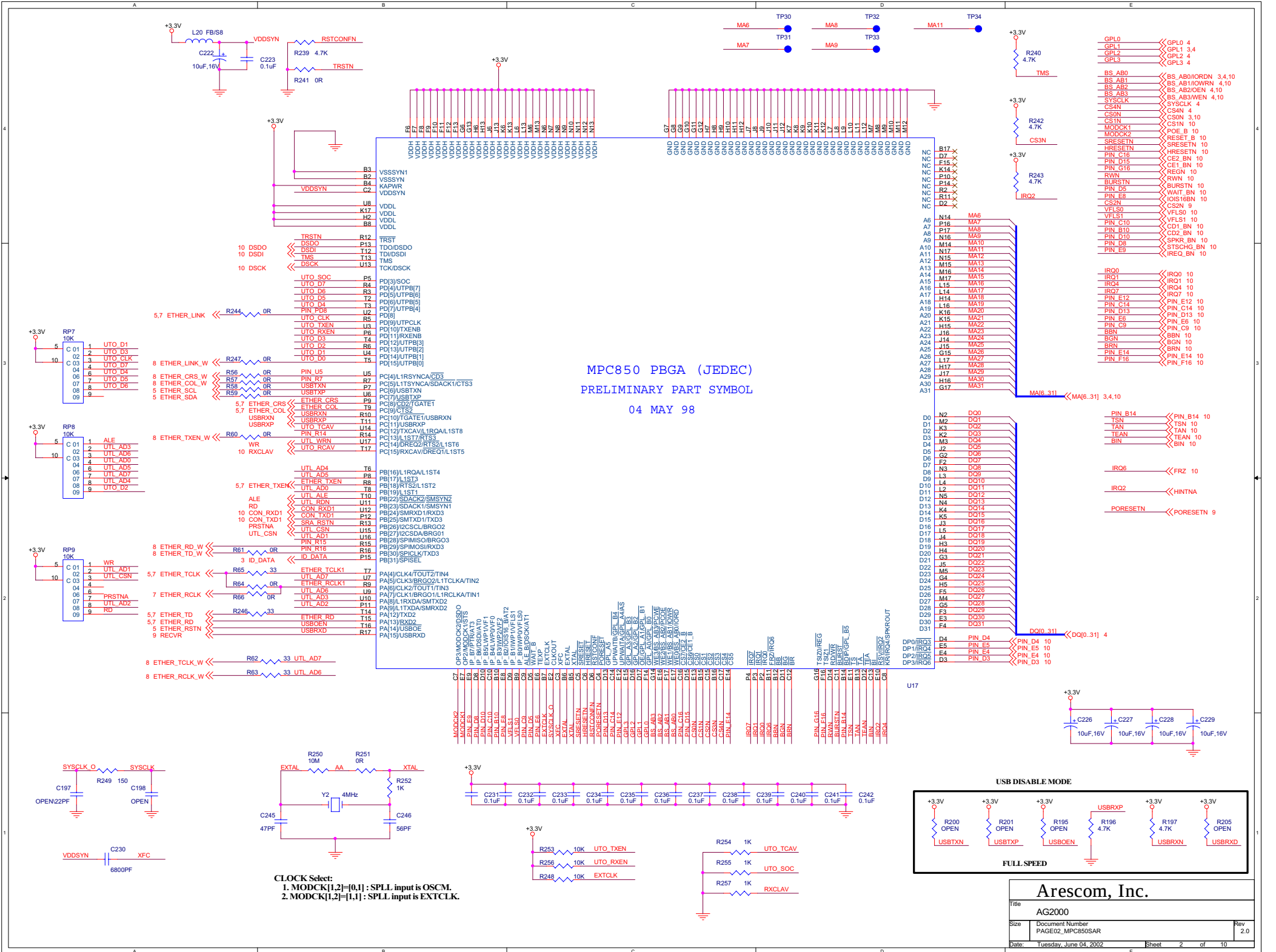
- A). CS0: FLASH.
- B). CS2: LED.
- C). CS4: SDRAM.

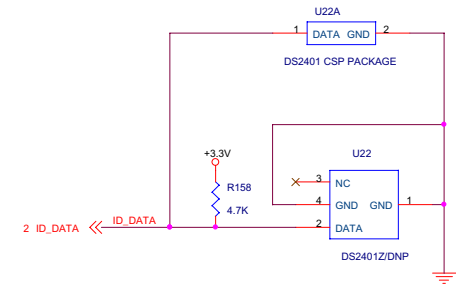
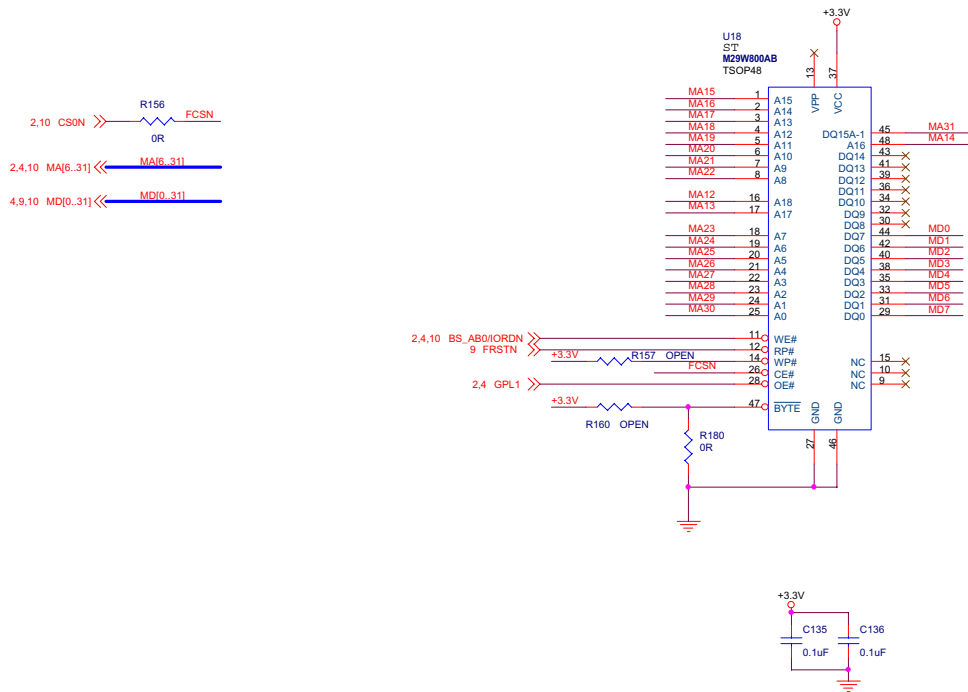
#### MPC 850 SAR BLOCK DIAGRAM:

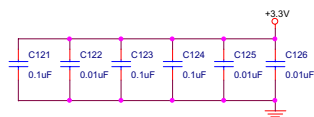
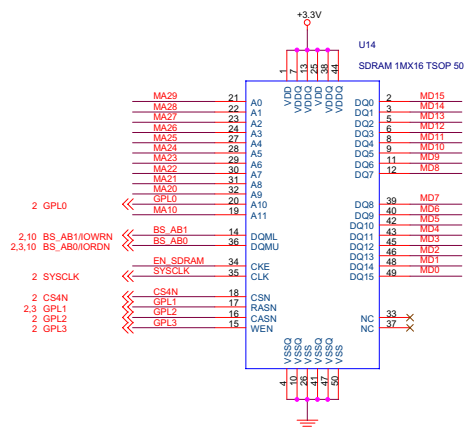
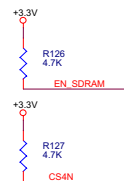
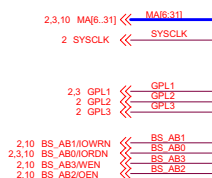
##### 2. LED ASSIGNMENTS: (ACTIVE LOW)

- A). MD0: DIAG (AMBER) .
- B). MD1: RESERVED .
- C). MD2: WAN LINK/ACT (GREEN) .
- D). MD3: LAN LINK/ACT (GREEN) .
- E). MD4: WLAN LINK/ACT (GREEN) .



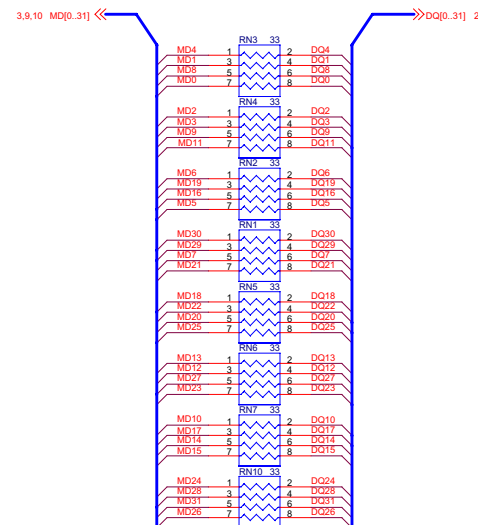
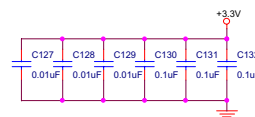
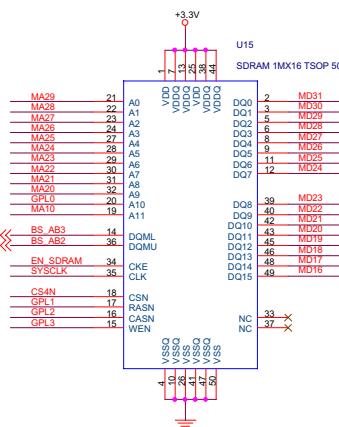






2.10 BS\_AB3/WEN << BS\_AB3

2.10 BS\_AB2/OEN << BS\_AB2



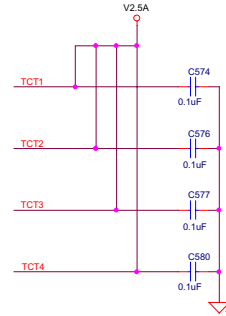
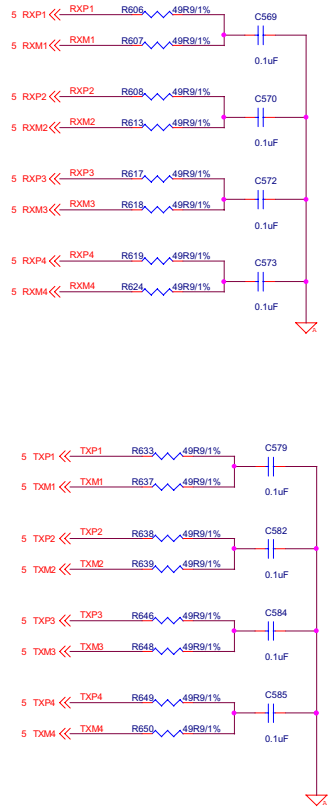


| Recommended configuration for normal operation |                       |                                                   |
|------------------------------------------------|-----------------------|---------------------------------------------------|
| PIN NAME                                       | UNMANAGED PROGRAMMING | FUNCTION DESCRIPTION                              |
| LED1_3                                         | UP                    | Flow control on all PHY ports                     |
| LED1_2                                         | UP                    | Flow control on ext MAC port                      |
| LED1_1                                         | DOWN                  | 205 buffers max per port (default)                |
| LED1_0                                         | DOWN                  | 205 buffers max per port (default)                |
| LED2_3                                         | UP                    | 5 Min. MAC address aging in address look up table |
| LED2_2                                         | DOWN                  | Pull down for normal operation                    |
| LED2_1                                         | UP                    | Back pressure in half duplex                      |
| LED2_0                                         | UP                    | Aggressive back off in half duplex                |
| LED3_3                                         | UP                    | No drop after 16 collisions                       |
| LED3_2                                         | UP                    | 25%-3% limit of broadcast frames                  |
| LED3_1                                         | FLOAT                 | Port 5 Auto-negotiation enable                    |
| LED3_0                                         | FLOAT                 | Port 4 Auto-negotiation enable                    |
| LED4_3                                         | FLOAT                 | Port 3 Auto-negotiation enable                    |
| LED4_2                                         | FLOAT                 | Port 2 Auto-negotiation enable                    |
| LED4_1                                         | FLOAT                 | Port 1 Auto-negotiation enable                    |
| LED4_0                                         | DOWN                  | Port 5 half duplex and Auto-negotiation enabled   |
| LED5_3                                         | DOWN                  | Port 4 half duplex and Auto-negotiation enabled   |
| LED5_2                                         | DOWN                  | Port 3 half duplex and Auto-negotiation enabled   |
| LED5_1                                         | DOWN                  | Port 2 half duplex and Auto-negotiation enabled   |
| LED5_0                                         | DOWN                  | Port 1 half duplex and Auto-negotiation enabled   |
| MRXD3                                          | DOWN                  | *Port 5 enable Auto-negotiation                   |
| MRXD2                                          | DOWN                  | *Port 4 enable Auto-negotiation                   |
| MRXD1                                          | DOWN                  | *Port 3 enable Auto-negotiation                   |
| MRXD0                                          | DOWN                  | *Port 2 enable Auto-negotiation                   |
| MCOL                                           | DOWN                  | *Port 1 enable Auto-negotiation                   |
| P5EXT                                          | DOWN                  | 5 port IS mode                                    |

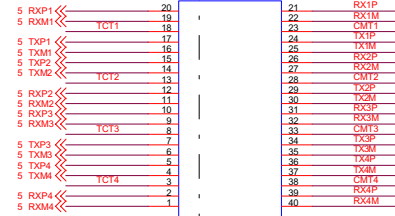
| Port 5 reverse SNI application |                       |                                          |
|--------------------------------|-----------------------|------------------------------------------|
| PIN NAME                       | UNMANAGED PROGRAMMING | FUNCTION DESCRIPTION                     |
| P5SNI                          | UP / DOWN             | SNI MODE / Port 5 MII interface          |
| P5EXT                          | UP                    | External MAC interface                   |
| MRXD3                          | UP                    | Disable Auto negotiation on port 5       |
| LED4_0                         | UP / DOWN             | Port 5 full duplex / half duplex         |
| LED3_1                         | DOWN / UP             | Port 5 force 10BaseT / 100BaseT          |
| LED1_2                         | UP                    | Flow control enable on external MAC port |



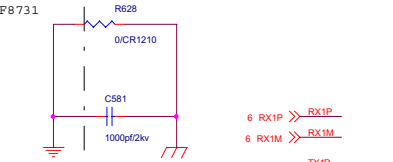
# NULL POWER & GROUND AREA



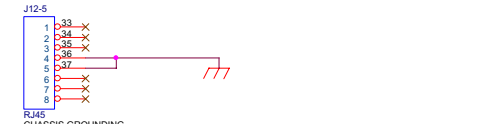
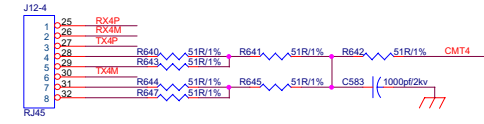
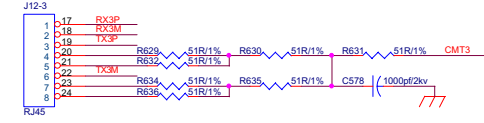
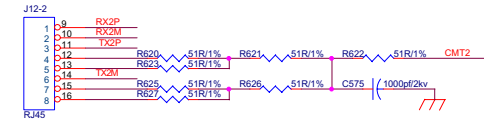
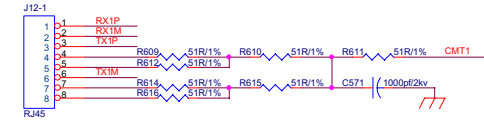
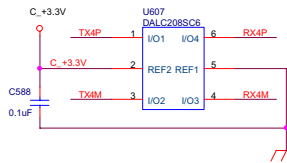
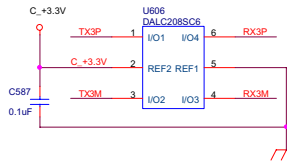
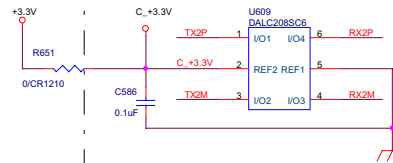
FOR KS9995:  
INSTALL R102 TO  
R106 and C28 to  
C34



Pulse H1164  
Bel Fuse 558-5999+Q9  
YCL PH406466  
Transpower HB826-2  
DELTA LP8731



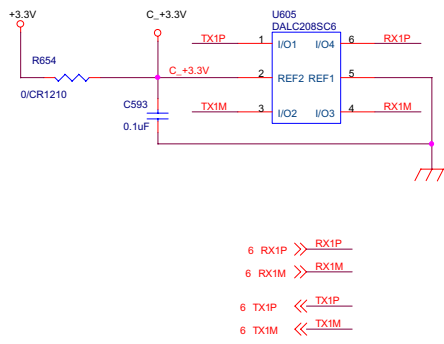
6 RX1P >> RX1P  
6 RX1M >> RX1M  
6 TX1P << TX1P  
6 TX1M << TX1M

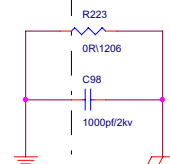
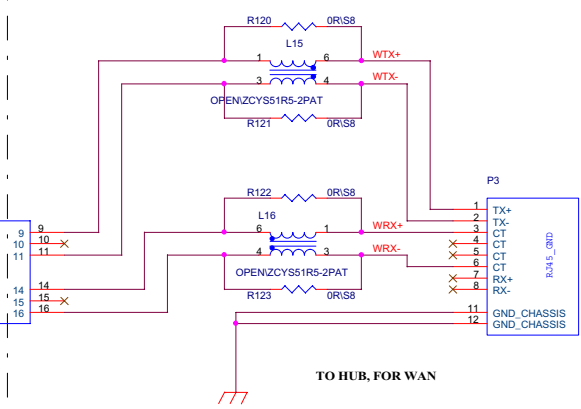
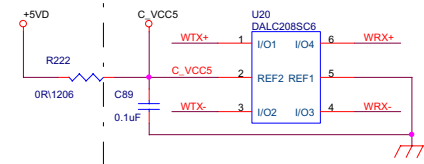
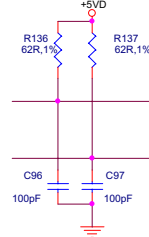
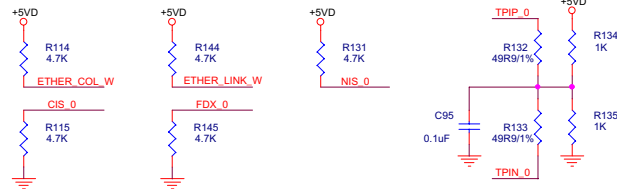
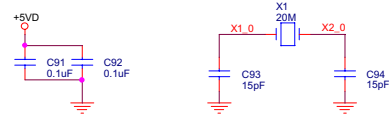
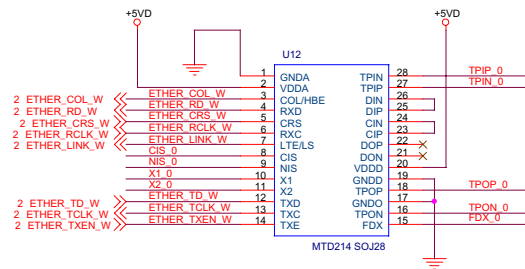


Arescom, Inc.

|       |                        |       |         |
|-------|------------------------|-------|---------|
| File  | AG2000                 | Rev   | 2.0     |
| Size  | Document Number        |       |         |
| C     | PAGE06_ETHERSW_XFRM    |       |         |
| Date: | Tuesday, June 04, 2002 | Sheet | 6 of 10 |

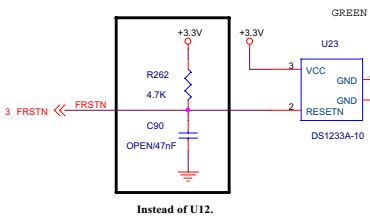
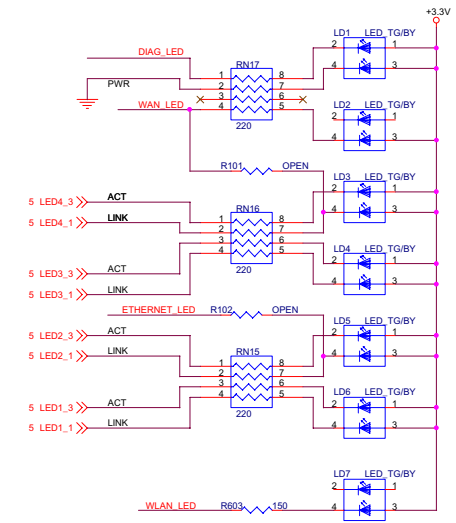
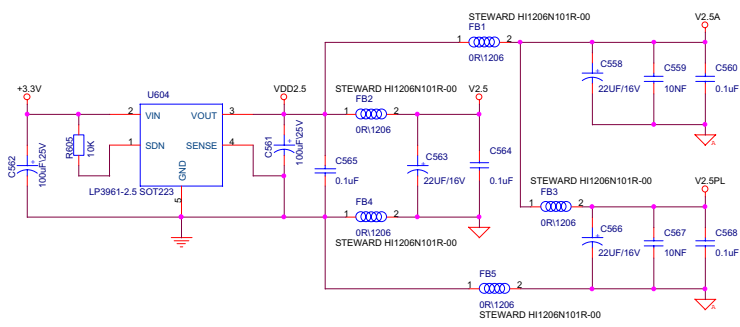
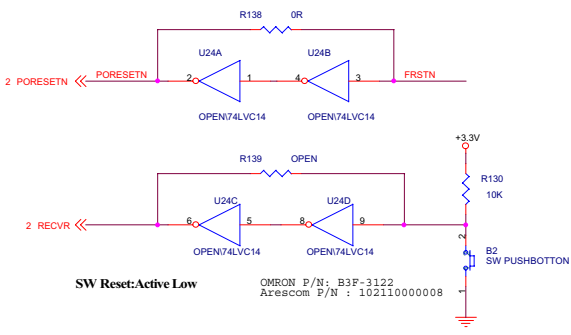
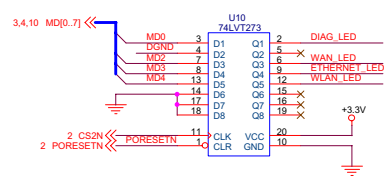
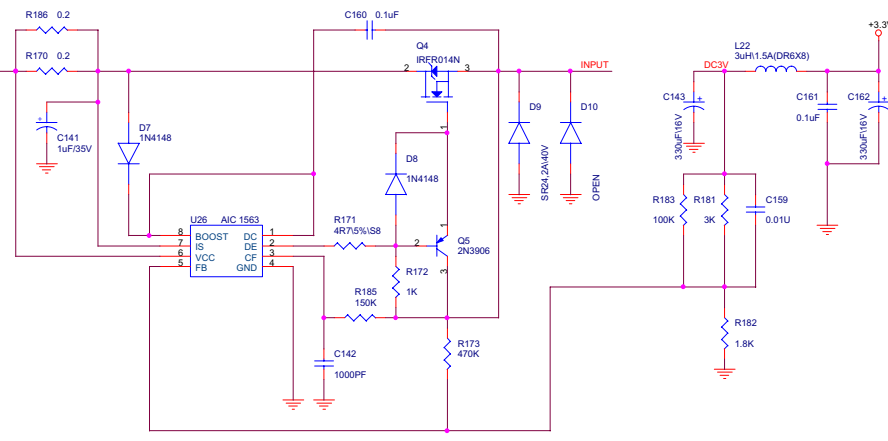
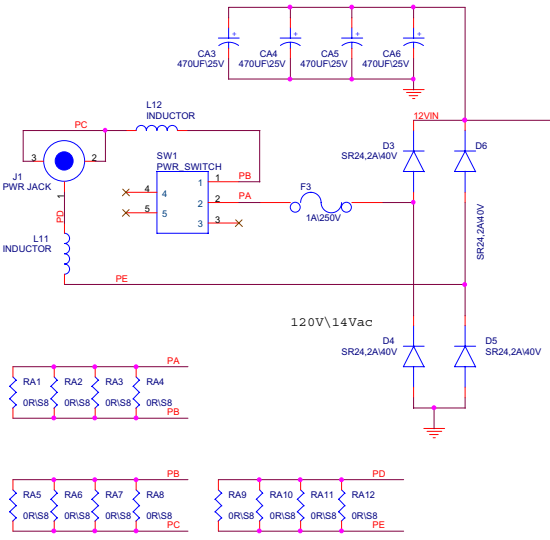
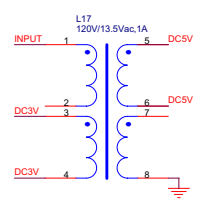
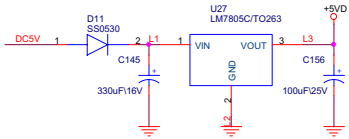
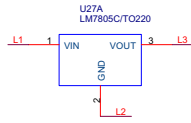
NULL POWER & GROUND AREA



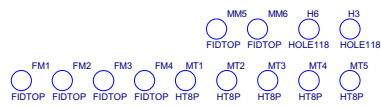


NULL POWER & GROUND AREA

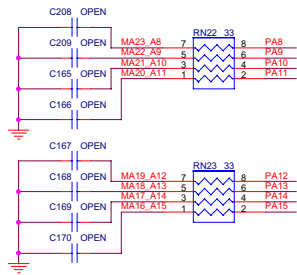
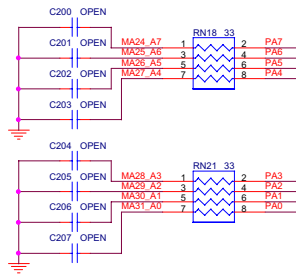




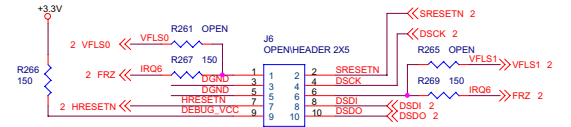
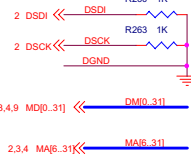
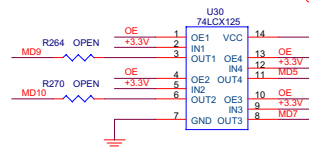
Instead of U12.



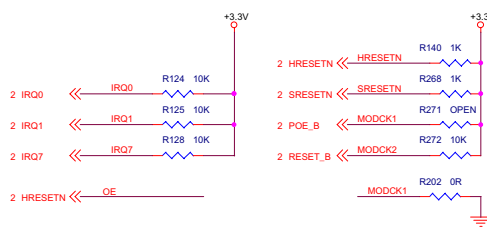
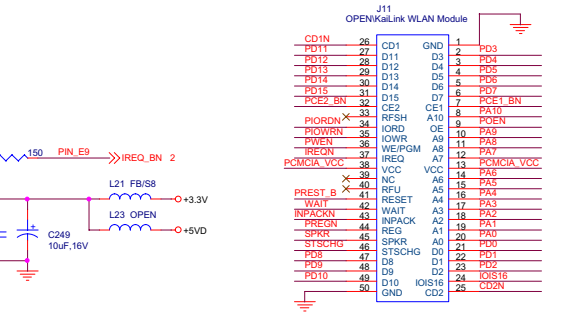
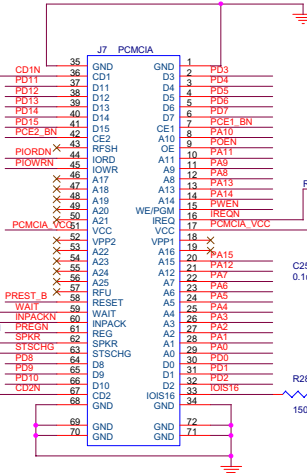
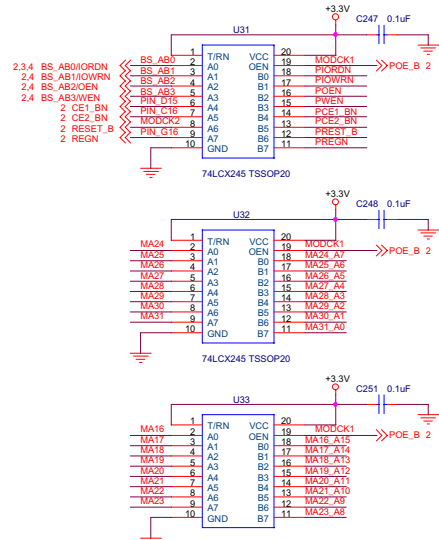
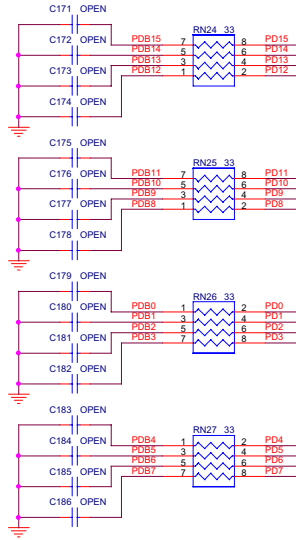
|               |                        |                |
|---------------|------------------------|----------------|
| Arescom, Inc. |                        |                |
| File:         | AG2000                 |                |
| Size:         | Document Number        | Rev: 2.0       |
| C:            | PAGE09_POWER_LED_RESET |                |
| Date:         | Tuesday, June 04, 2002 | Sheet: 9 of 10 |



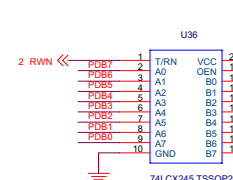
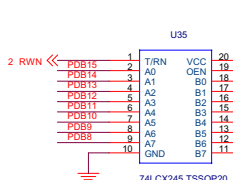
(MD9,MD10)=(0,0) for PCMCIA's DBGCC.  
(MD4,MD5)=(0,1) for 8-bit boot port size.  
(MD4,MD5)=(1,0) for 16-bit boot port size.



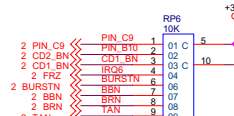
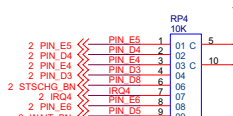
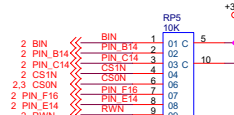
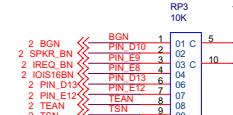
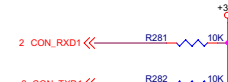
Decoupling CAP Select: 220pF



Note: Read is data from PCMCIA to MP850. RWN=1, A to B



CLOCK Select:  
1. MODCK[1,2]=[0,1]: SPILL input is OSCM.  
2. MODCK[1,2]=[1,1]: SPILL input is EXTCLK.



Arescom, Inc.