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| REVISIONS |     |             |          |
|-----------|-----|-------------|----------|
| EC        | REV | DESCRIPTION | DATE     |
| CPR       | A   | NEW RELEASE | 09/27/05 |

NOTES: UNLESS OTHERWISE SPECIFIED

1. PART NUMBER CHANGES AND OR DESIGN CHANGES AFFECTING ITEM INTERCHANGEABILITY REQUIRE PRIOR ELCON APPROVAL AND AUTHORIZATION BY REVISION TO THIS DRAWING.

2. ITEMS PROVIDED TO THIS SPECIFICATION ARE TO BE PERMANENTLY IDENTIFIED ON THE PART AND PACKAGE WITH THE FOLLOWING INFORMATION: PART NUMBER AND DATE CODE OF MANUFACTURE.

3. MATERIALS:

INSULATOR: VALOX 420-SEO, UL RATED, 94V-0, COLOR- BLACK.  
 BACKPLANE CONTACTS: BRASS, CDA 36000  
 CROWN BANDS: BeCu, CDA 17200, HEAT TREATED  
 HOT PLUG HOODS: BeCu, CDA 17300  
 MOUNTING HARDWARE: STEEL.

4. FINISHES:

SIZE #12 AND #20 CONTACTS: GOLD PLATED.  
 SIZE #8 CONTACT: SILVER PLATED.  
 CROWN BANDS: GOLD PLATED.  
 HOT PLUG HOODS: GOLD PLATED.  
 MOUNTING HARDWARE: ZINC PLATED.

5. INSERTION FORCE (MAX) AND WITHDRAWAL FORCE (MIN) IN OUNCES:

| SIZE | INSERTION | RETENTION |
|------|-----------|-----------|
| 8    | 48        | 12        |
| 12   | 80        | 16        |
| 20   | 5         | 1         |

6. MOUNTING HARDWARE WILL BE PACKAGED SEPARATELY AND SHIPPED LOOSE WITH THE CONNECTOR ASSEMBLY.

REF PN: 1-1428066-0 (WAS 903-0104-02300) SCREW, PAN HEAD, PHILIPS (2 EA)  
 5018030-1 (WAS 903-37-02300) HEX NUT, 3mm x 2.4 (2 EA)

7. BACKPLANE CONNECTOR REFERENCE ASSEMBLY PART NUMBERS:

TYCO PN: 6643101-1 (RoHS VERSION OF ELCON PN 235-0144-00100B)  
 SUN MICRO PN: 130-4461-01

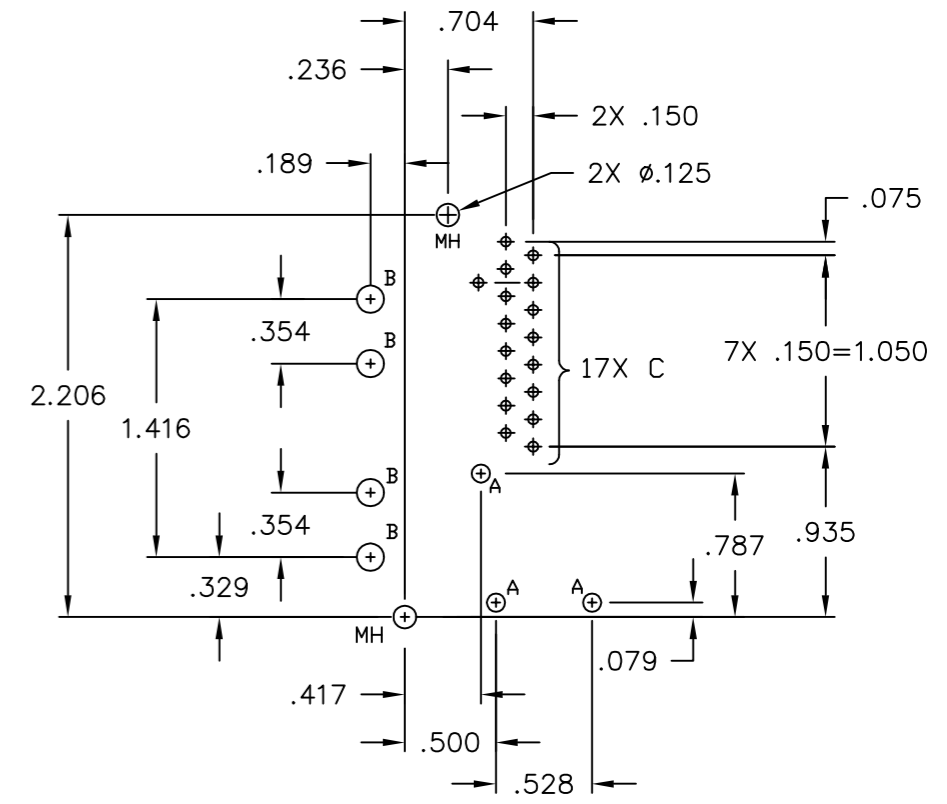
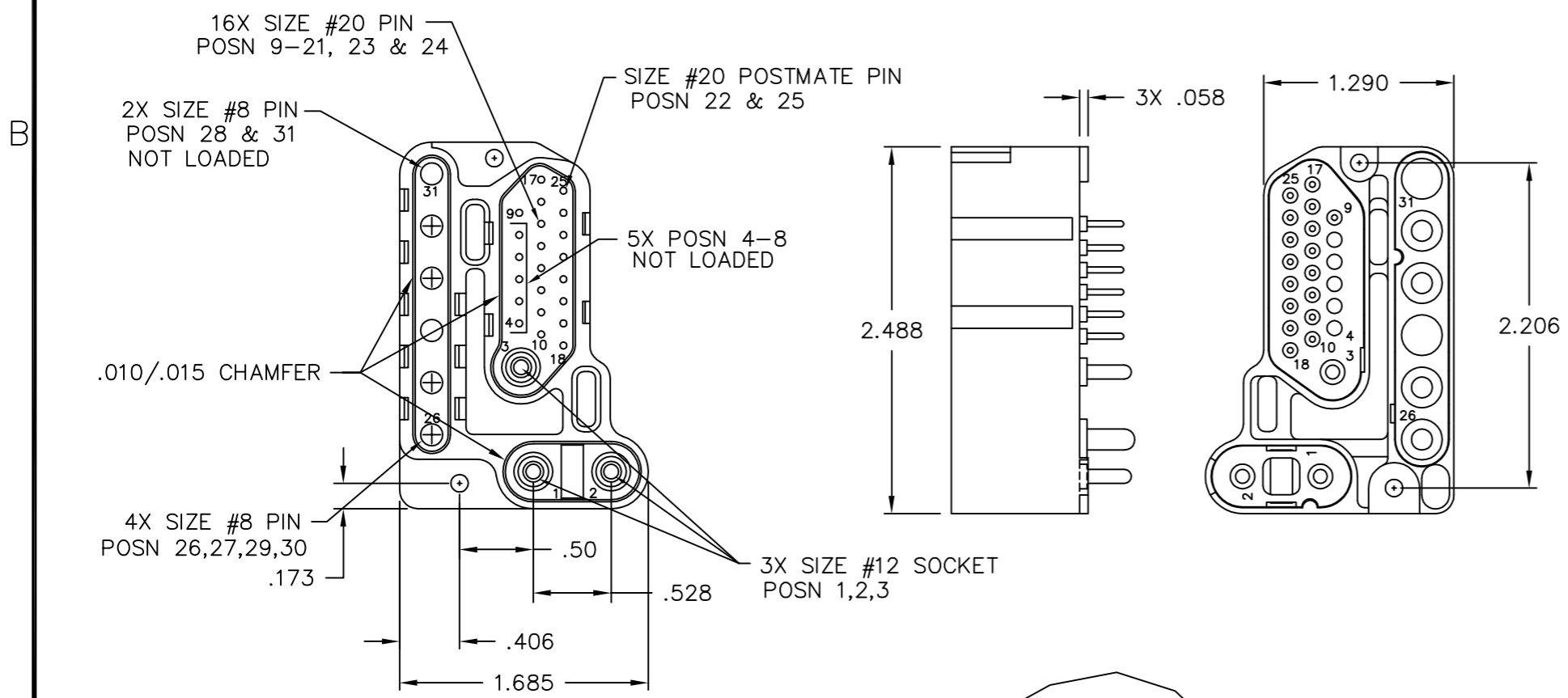
8. PIN & SOCKET PCB TAIL CONTACTS INSTALLED.  
 REFERENCE PART NUMBERS, DESCRIPTION & ARRANGEMENT BELOW.

| PART NUMBER | DESCRIPTION                          | POSITION     | QTY | PIN DIA AS APPLIED |
|-------------|--------------------------------------|--------------|-----|--------------------|
| 1648356-2   | SOCKET CONTACT, #12, PCB TAIL        | 1-3          | 3   | NOT APPLICABLE     |
| 1650203-1   | PIN CONTACT, #20, PCB TAIL, STD      | 9-21, 23, 24 | 15  | .041/.039          |
| 1650206-1   | PIN CONTACT, #20, PCB TAIL, POSTMATE | 22 & 25      | 2   | .041/.039          |
| 1766218-1   | PIN CONTACT, #8, PCB TAIL            | 26,27,29,30  | 4   | .143/.141          |

|  |  |  |   |                      |
|--|--|--|---|----------------------|
| <p>THIRD ANGLE PROJECTION</p> <p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (METRIC)</p> <p>TOLERANCES</p> <p>ANGLES ± .5°</p> <p>DECIMALS</p> <p>.XXX ± .010 (.25)</p> <p>.XX ± .02 (.3)</p> | <p>INCH OR INCH (MM)</p> <p>DRAWN</p> <p>LOVATO/M. ALIM</p> <p>CHECKED</p> <p>APPROVED</p> <p>APPROVED</p> <p>D. CHAU</p> <p>DCA APPROVED</p> <p>M. ALIM</p> <p>ACAD FILE NUMBER</p> | <p>DATE</p> <p>09/27/05</p> <p>09/27/05</p> <p>09/27/05</p> <p>C6643101A.DWG</p> | <p><b>tyco</b> Tyco Electronics Corporation<br/> <b>Electronics</b> Menlo Park, Ca 94025</p> <p><b>ELCON</b></p> <p>TITLE</p> <p>CONNECTOR, PIN<br/>       BACKPLANE<br/>       PN 6643101-1</p> <p>SIZE DWG NUMBER</p> <p>B C= 6643101</p> | <p>REV.</p> <p>A</p> |
|  | <p>DATE</p> <p>09/27/05</p>  |  | <p>REV.</p> <p>A</p>  |                      |
|  | <p>DATE</p> <p>09/27/05</p>  |  | <p>REV.</p> <p>A</p>  |                      |
|  | <p>DATE</p> <p>09/27/05</p>  |  | <p>REV.</p> <p>A</p>  |                      |
| <p>ACAD FILE NUMBER C6643101A.DWG</p>  |  |  | <p>DWG SCALE 1=1</p>  | <p>SH 1 OF 3</p>     |

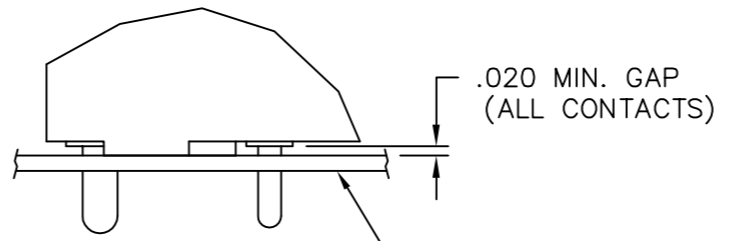
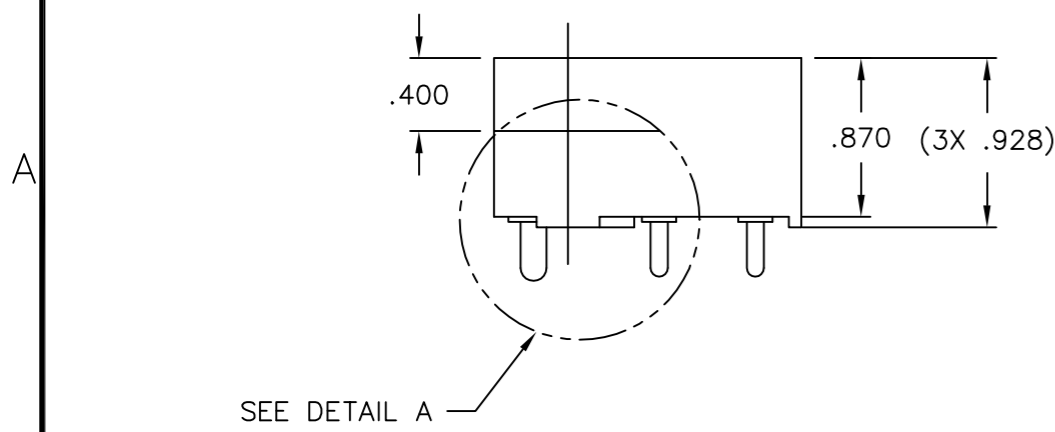
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| REVISIONS |     |             |      |
|-----------|-----|-------------|------|
| EC        | REV | DESCRIPTION | DATE |
|           |     | SEE SHEET 1 |      |



SUGGESTED PCB LAYOUT

| HOLE IDENT | SIZE | QTY | CONTACT |
|------------|------|-----|---------|
| A          | 12   | 3   | SOCKET  |
| B          | 8    | 4   | PIN     |
| C          | 20   | 17  | PIN     |



DETAIL A  
(MOUNTED ON PCB)  
NO SCALE

|  |   |                              |  |  |           |                          |           |
|--|---|------------------------------|--|--|-----------|--------------------------|-----------|
| INCH OR INCH (MM)<br><br>THIRD ANGLE PROJECTION<br>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (METRIC)<br>TOLERANCES<br>ANGLES $\pm$ .5°<br>DECIMALS<br>.XXX $\pm$ .010 (.25)<br>.XX $\pm$ .02 (.3) | DRAWN<br>LOVATO/M. ALIM<br>CHECKED  | DATE<br>09/27/05             | <br>Tyco Electronics Corporation<br>Menlo Park, Ca 94025<br> | TITLE<br>CONNECTOR, PIN<br>BACKPLANE<br>PN 6643101-1 | SIZE<br>B | DWG NUMBER<br>C= 6643101 | REV.<br>A |
|  | APPROVED<br>D. CHAU<br>DCA APPROVED<br>M. ALIM<br>ACAD FILE NUMBER<br>C6643101A.DWG | DATE<br>09/27/05<br>09/27/05 |  |  |           |                          |           |

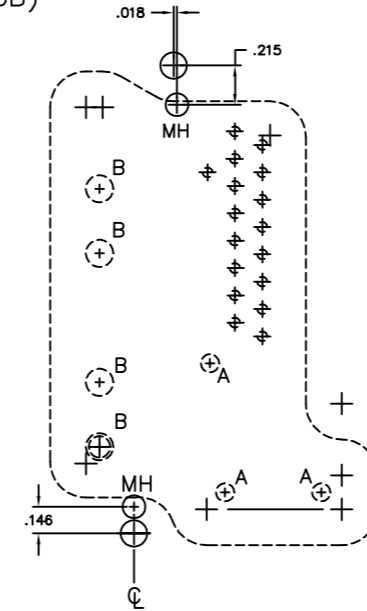
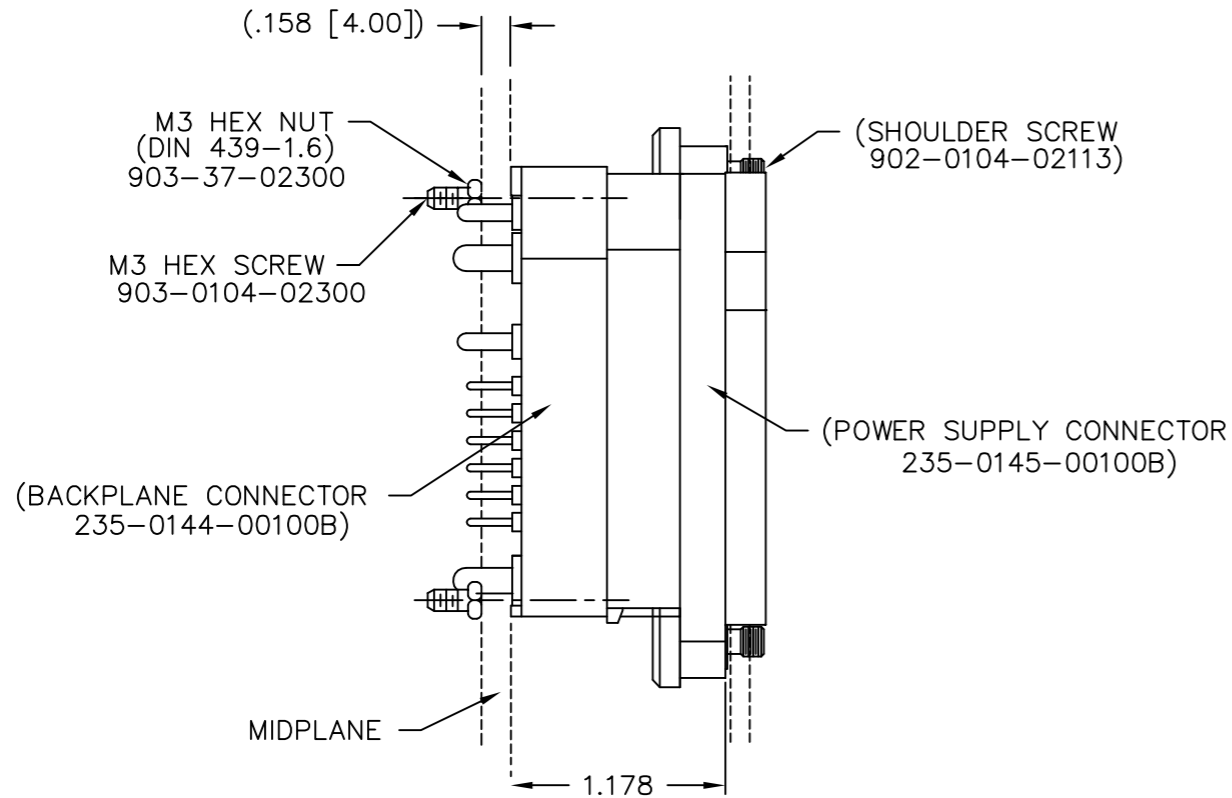
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## CONNECTOR SET, MATED

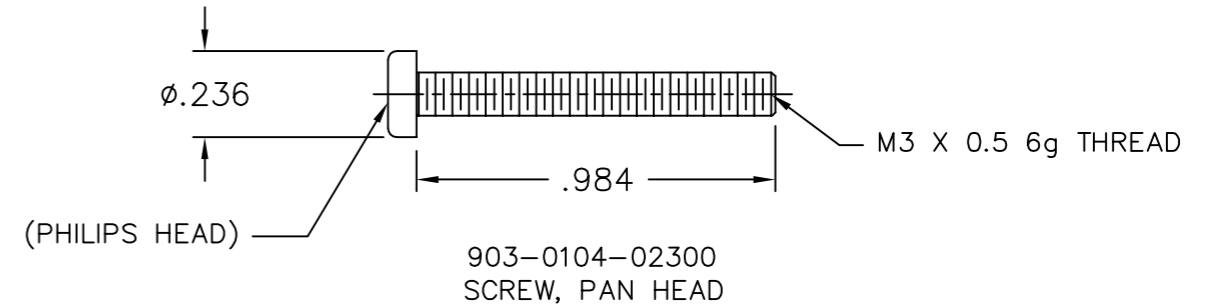
TYCO PN 6643101-1, RoHS VERSION OF ELCON PN 235-0144-00100B  
& TYCO PN 6651160-1, RoHS VERSION OF ELCON PN 235-0145-00100B)

### REVISIONS

| EC | REV | DESCRIPTION | DATE |
|----|-----|-------------|------|
|    |     | SEE SHEET 1 |      |

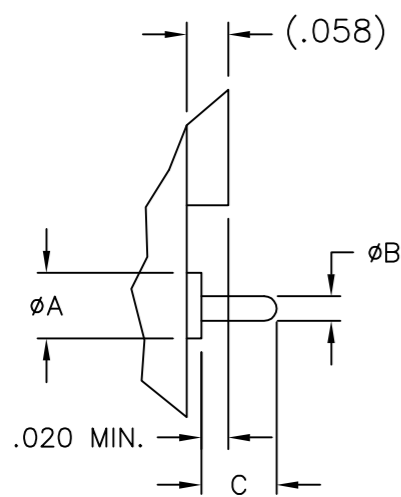


PANEL CUTOUT MATING POWER SUPPLY  
CONNECTOR SUPERIMPOSED (DASHED LINE)  
OVER PCB LAYOUT OF BACKPLANE CONNECTOR



903-0104-02300  
SCREW, PAN HEAD

SCALE : 2=1



### PC SOLDER TAIL

| DIM | CONTACT SIZE |      |      |
|-----|--------------|------|------|
|     | 20           | 12   | 8    |
| A   | .102         | .188 | .276 |
| B   | .040         | .093 | .142 |
| C   | .280         | .330 | .340 |

NO SCALE

|  |  |                                  |  |
|--|--|----------------------------------|--|
| INCH OR INCH (MM)<br><br>THIRD ANGLE PROJECTION<br>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (METRIC)<br>TOLERANCES<br>ANGLES ± .5°<br>DECIMALS<br>.XXX ± .010 (.25)<br>.XX ± .02 (.3) | DRAWN<br>LOVATO/M. ALIM<br>CHECKED   | DATE<br>09/27/05                 | <br>Tyco Electronics Corporation<br>Menlo Park, Ca 94025<br>   |
|  | APPROVED<br>D. CHAU<br>DCA APPROVED<br>M. ALIM<br>ACAD FILE NUMBER C6643101A.DWG | APPROVED<br>09/27/05<br>09/27/05 | TITLE<br>MATING CONNECTOR AND<br>MOUNTING HARDWARE<br>PN 6643101-1<br>SIZE B<br>DWG NUMBER<br>C= 6643101 |
| DWG SCALE 1=1 SH 3 OF 3  |  |                                  |  |