

- NOTES:
1. PARENTHETICAL ITEM IDENTIFICATION DENOTES: (ITEM FIND NO.-QTY).
  2. REFERENCE DESIGNATORS ARE USED IN LIEU OF ITEM FIND NUMBERS.
  3. 500-6520-001 MAY BE UTILIZED ON THIS ASSEMBLY.
  4. TO BE TESTED AT A HIGHER LEVEL.
  5. SOLDER PER COMMERCIAL REQUIREMENTS (500-5178-000).
  6. MAXIMUM Z TOP DIMENSION SHALL NOT EXCEED .100, EXCEPT WHERE SPECIFIED. SEE SHEET 7 FOR Z TOP RESTRICTIONS. SEE SHEET 8 FOR Z BOTTOM RESTRICTIONS.
  7. MARK REV LETTER FOLLOWING THE APPROPRIATE LETTERS PER 939-0497-001.
  8. MAXIMUM LEAD PROTRUSION TO BE .100.
  9. "T" DESIGNATES BOARD TOP SURFACE.
  10. PER MANUFACTURING, PROJECT OR CONTRACT REQUIREMENTS, MARK THE MANUFACTURING CONTROL NUMBER BELOW THE LETTERS MCM PER 839-0497-001.
  11. CAUTION: THIS ASSEMBLY CONTAINS ELECTROSTATIC SENSITIVE DEVICES, HANDLE PER 500-0687-001. IDENTIFY PER 500-6535-001. LOCATE ITEM 6 APPROXIMATELY AS SHOWN.
  12. POSTCORT TOP AND BOTTOM SIDES PER 500-5458-001. CROSSHATCHED AREAS TO BE FREE OF PLO-CORT, TOP AND BOTTOM.
  13. ITEM 18 TO BE PROGRAMMED WITH DSG-001 BEFORE INSTALLATION.
  14. EXPOSING ITEM 16 TO THE FOLLOWING CHEMICALS MUST BE AVOIDED.
    - BIORACT EC7-R -- 838-2013-XXX
    - SOLVATING AGENT 70 -- 838-2512-XXX
    - MFE-7100 -- 838-2515-XXX
    - BIORACT SC-10 -- 838-2513-XXX
    - XYLENE -- 005-0836-XXX
    - TOLUENE -- 005-1197-XXX
    - MUMISEAL 1821 -- 839-0506-XXX
- CONTRACT IE (OR AOE/AE) BEFORE ITEM 16 IS EXPOSED TO ANY OTHER CHEMICALS. IF EXPOSURE TO ANY OF THE CHEMICALS LISTED ABOVE OCCURS CONTRACT IE.

| SCHEMATIC AND FAB BOARD APPLICABILITY REF. TABLE |              |               |  |
|--|--------------|---------------|--|
| SCHEMATIC  | FAB BOARD    | CKT CARD ASST |  |
| 828-8711-002                                     | 826-0008-054 | 828-3311-002  |  |

| REVISIONS |             |      |       |
|-----------|-------------|------|-------|
| LT#       | DESCRIPTION | DATE | APPRO |
|           |             |      |       |

PARTS LIST CONTINUED ON PAGE 2

| QTY | ITEM | PART OR IDENT NO. | DESCRIPTION         | NOTES  | REF DESIGNATORS |
|-----|------|-------------------|---------------------|--|-----------------|
| 1   | 99   | 819-0028-130      | COIL, 1             | L4   |                 |
| 2   | 98   | 814-0126-040      | DIODE, 15M07.0A     | VR4,5  |                 |
| 1   | 97   | 814-0022-010      | DIODE, HSN5-2000    | CR1  |                 |
| 1   | 96   | 813-7059-020      | TRANSISTOR, IRLL110 | Q2   |                 |
| 2   | 95   | 835-1509-010      | IC, 71AC00          | U17,37   |                 |
| 3   | 94   | 835-0367-010      | IC, 482             | U9,14,15   |                 |
| 2   | 93   | 835-0355-050      | IC, 1120            | U4,6   |                 |
| 6   | 92   | 835-0139-030      | IC, MC33070D        | U2,11,16,58,59,120   |                 |
| 2   | 91   | 831-5013-050      | CAPACITOR, 0.01     | C4,5   |                 |
| 1   | 90   | 831-5008-000      | CAPACITOR, 3.9 pF   | C73  |                 |
| 1   | 89   | 831-5005-090      | CAPACITOR, 1        | C276   |                 |
| 2   | 88   | 831-5005-070      | CAPACITOR, 0.1      | C250,257   |                 |
| 2   | 87   | 831-2000-220      | CAPACITOR, 15       | C251,252   |                 |
| 4   | 86   | 831-2000-130      | CAPACITOR, 10       | C35,39,74,254  |                 |
| 20  | 85   | 831-2000-140      | CAPACITOR, 4.7      | C3,8,13,14,76,75,79, 87-90,234,236,250, 259,262,393,398,400, 439 |                 |
| 10  | 84   | 831-2000-070      | CAPACITOR, 1        | C2,6,10,23,62-65,77, 142   |                 |
| 1   | 83   | 831-2000-030      | CAPACITOR, 0.22     | C239   |                 |
| 2   | 82   | 833-6726-300      | RESISTOR, 2 k       | R375,376   |                 |
| 6   | 81   | 833-6526-550      | RESISTOR, 36.5      | R4,5,279,280,301,302   |                 |
| 4   | 80   | 833-6526-340      | RESISTOR, 22.1      | R718,719,732,763   |                 |
| 3   | 79   | 833-6526-010      | RESISTOR, 10        | R272,722,723   |                 |
| REF | 78   | 828-0711-002      | SCHEMATIC           |  |                 |
| 1   | 77   | 705-3510-270      | RESISTOR, 150       | R767   |                 |

| QTY | ITEM | PART OR IDENT NO. | DESCRIPTION      | NOTES | REF DESIGNATORS   |
|-----|------|-------------------|------------------|-------|---|
| 4   | 76   | 705-3539-020      | RESISTOR, 51.1   |       | R275,276,297,298  |
| 2   | 75   | 705-3537-020      | RESISTOR, 5.11 k |       | R9,17   |
| 1   | 74   | 705-3535-730      | RESISTOR, 475    |       | R23   |
| 2   | 73   | 705-3535-550      | RESISTOR, 301    |       | R472,473  |
| 6   | 72   | 705-3535-270      | RESISTOR, 12.1 k |       | R555,556,566,569-571  |
| 6   | 71   | 705-3535-200      | RESISTOR, 1 k    |       | R11,36,236-239  |
| 2   | 70   | 705-3535-050      | RESISTOR, 49.9 k |       | R720,721  |
| 6   | 69   | 705-3205-000      | RESISTOR, 24.3 k |       | R550,551,570,581-583  |
| 1   | 68   | 705-3205-020      | RESISTOR, 10.2 k |       | R727  |
| 6   | 67   | 705-3204-050      | RESISTOR, 3.92 k |       | R913,544,500-509  |
| 2   | 66   | 705-3204-100      | RESISTOR, 1.3 k  |       | R390,397  |
| 1   | 65   | 705-3204-070      | RESISTOR, 301    |       | R766  |
| 2   | 64   | 705-2439-590      | RESISTOR, 22.1   |       | R245,246  |
| 1   | 63   | 705-2439-110      | RESISTOR, 200 k  |       | R94   |
| 1   | 62   | 705-2439-060      | RESISTOR, 102 k  |       | R400  |
| 5   | 61   | 705-2439-950      | RESISTOR, 100 k  |       | R130,140-151  |
| 1   | 60   | 705-2438-020      | RESISTOR, 61.9 k |       | R144  |
| 2   | 59   | 705-2438-010      | RESISTOR, 56.2 k |       | R97,478   |
| 1   | 58   | 705-2438-070      | RESISTOR, 20.7 k |       | R725  |
| 67  | 57   | 705-2438-590      | RESISTOR, 20 k   |       | R0,12-14,20,24,27-30, 32,33,36,37,74,85,87, 90-92,96,98,104,113, 116-118,120,121,123, 125,127-130,138,140, 167-173,177,179-186, 205-209,377,378,380, 693,694,700,704,705, 709,710 |
| 2   | 56   | 705-2438-510      | RESISTOR, 13 k   |       | R309,396  |
| 1   | 55   | 705-2438-190      | RESISTOR, 12.1 k |       | R162  |
| 17  | 54   | 705-2438-440      | RESISTOR, 10 k   |       | R10,76,95,107-110, 114,115,131,132,135, 136,201,204,301,705   |
| 1   | 53   | 705-2438-420      | RESISTOR, 0.25 k |       | R99   |
| 2   | 52   | 705-2438-100      | RESISTOR, 7.5 k  |       | R3,15   |
| 3   | 51   | 705-2438-350      | RESISTOR, 5.11 k |       | R100,724,827  |
| 13  | 50   | 705-2438-330      | RESISTOR, 4.75 k |       | R18,26,48,49,51,141, 306-308,309-305,726  |
| 1   | 49   | 705-2438-260      | RESISTOR, 3.32 k |       | R45   |
| 3   | 48   | 705-2438-190      | RESISTOR, 2.21 k |       | R105,119,122  |
| 1   | 47   | 705-2438-160      | RESISTOR, 2 k    |       | R39   |
| 1   | 46   | 705-2438-120      | RESISTOR, 1.62 k |       | R102  |
| 2   | 45   | 705-2438-110      | RESISTOR, 1.5 k  |       | R2,84   |
| 40  | 44   | 705-2438-050      | RESISTOR, 1 k    |       | R1,7,16,22,41-44,55, 56,59,61-69,71-73, 75-77,90,82,101,103, 106,124,126,133, 192-197,293,479,711   |
| 1   | 43   | 705-2437-940      | RESISTOR, 681    |       | R477  |

| QTY | ITEM | PART OR IDENT NO. | DESCRIPTION         | NOTES | REF DESIGNATORS   |
|-----|------|-------------------|---------------------|-------|---|
| 1   | 42   | 705-2437-000      | RESISTOR, 162       |       | R19   |
| 6   | 41   | 705-2437-400      | RESISTOR, 100       |       | R21,25,79,81,134,731  |
| 13  | 40   | 705-2437-300      | RESISTOR, 51.1      |       | R86,88,93,111,112, 257-264  |
| 82  | 39   | 705-2437-230      | RESISTOR, 33.2      |       | R47,50,52-54,69,292, 294-296,305-325,327, 329,331,336,340,360, 384,401-423,440-455, 474,475,537,625,626 |
| 1   | 38   | 705-2437-050      | RESISTOR, 10        |       | R690  |
| 21  | 37   | 705-2437-010      | RESISTOR, 0         |       | R8,31,34,35,61-63,70, 83,137,142,244,247, 249-252,254,255,530, 539                                      |
| 2   | 35   | 357-7533-030      | CONN,ELEC           |       | P3,5  |
| 3   | 34   | 353-1552-010      | DIODE, UP5019       |       | CR2,3,12  |
| 6   | 33   | 353-0611-040      | DIODE, UP108        |       | VR2,3,6,7,12,13   |
| 1   | 32   | 353-0307-130      | DIODE, MMS32BRLT1   |       | CR71  |
| 1   | 31   | 351-9085-050      | IC, AD6640          |       | U3  |
| 1   | 30   | 351-9084-030      | IC, NC75214MSX      |       | U121  |
| 1   | 29   | 351-9084-100      | IC, AD8801AR        |       | U47   |
| 1   | 28   | 351-9084-390      | IC, X25308S1-2.5    |       | U45   |
| 1   | 27   | 351-9084-330      | IC, AD1502BRT       |       | U110  |
| 1   | 26   | 351-9084-240      | IC, TPS3905-25D     |       | U56   |
| 1   | 25   | 351-9084-170      | IC, NC75108MS       |       | U12   |
| 3   | 24   | 351-9084-110      | IC, AD5322-08M      |       | U88,69,124  |
| 2   | 23   | 351-9084-070      | IC, LTC1063-0       |       | U55,125   |
| 1   | 22   | 351-9083-070      | IC, AD6620          |       | U1  |
| 1   | 21   | 351-9083-960      | IC, TP576325DBVT    |       | U7  |
| 1   | 20   | 351-9083-520      | IC, AD9408P         |       | U49   |
| 1   | 19   | 351-1133-010      | IC, SN00P2          |       | U10   |
| 1   | 18   | 351-1125-050      | IC, ASYX332A-PQ2001 | 13    | U8  |
| 1   | 17   | 351-3298-010      | IC, TPS73010DBVT    |       | U42   |
| 1   | 16   | 351-3222-010      | IC, GT26F100C08A90  | 14    | U40   |
| 1   | 15   | 351-3111-050      | IC, THS320VCNP16    |       | U44   |
| 1   | 14   | 351-2680-010      | IC, MAX148          |       | U46   |
| 1   | 13   | 351-2093-020      | IC, MAX91E          |       | U5  |
| 2   | 12   | 351-1278-030      | IC, 2901            |       | U71,77  |
| 1   | 11   | 351-0475-010      | IC, NC7520PHS       |       | U120  |
| 3   | 10   | 351-0473-010      | IC, NC75232HS       |       | U30,110,111   |
| 1   | 9    | 351-0414-020      | IC, 1129            |       | U61   |
| 2   | 8    | 350-1001-020      | IC, NETWORK         |       | U74,76  |
| 2   | 7    | 350-1001-010      | IC, NETWORK         |       | U96,100   |
| 1   | 6    | 280-2745-040      | LABEL,ESD           | 11    |   |
| 1   | 5    | 277-0825-020      | IC, 23.100 MHz      |       | U50   |
| 1   | 4    | 241-0060-010      | FILTER, 3300 pF     |       | FL1,2   |
| 1   | 3    | 240-2919-010      | WTR, 1-30 MHz       |       | T1  |
| 2   | 2    | 240-2933-130      | COIL, 10            |       | L6,7  |
| 1   |      | 826-0008-054      | FAB                 |       |   |

| QTY   | ITEM | PART OR IDENT NO. | DESCRIPTION | NOTES | REF DESIGNATORS |
|---|------|-------------------|-------------|-------|-----------------|
| PARTS LIST (US CUSTOMARY MEASUREMENTS ONLY) |      |                   |             |       |                 |

| QTY   | ITEM | PART OR IDENT NO. | DESCRIPTION | NOTES | REF DESIGNATORS |
|---|------|-------------------|-------------|-------|-----------------|
| PARTS LIST (US CUSTOMARY MEASUREMENTS ONLY) |      |                   |             |       |                 |

| QTY   | ITEM | PART OR IDENT NO. | DESCRIPTION | NOTES | REF DESIGNATORS |
|---|------|-------------------|-------------|-------|-----------------|
| PARTS LIST (US CUSTOMARY MEASUREMENTS ONLY) |      |                   |             |       |                 |

REDAC

|                                |  |  |  |
|--------------------------------|--|--|--|
| PREP BY: COLLETTIE Sep 14 2001 |  | ROCKWELL COLLINS, INC                  |  |
| CHK BY: FABRY                  |  | CIRCUIT CARD ASSEMBLY, DSP A2          |  |
| DWG NO: 828-3311-002           |  | REV: -                                 |  |
| DWG MOD: D 4V792               |  | SCALE: NONE                            |  |
| SHEET 1 OF 10                  |  | DIGITAL DATA ONLY, NO MASTER TRACKING. |  |

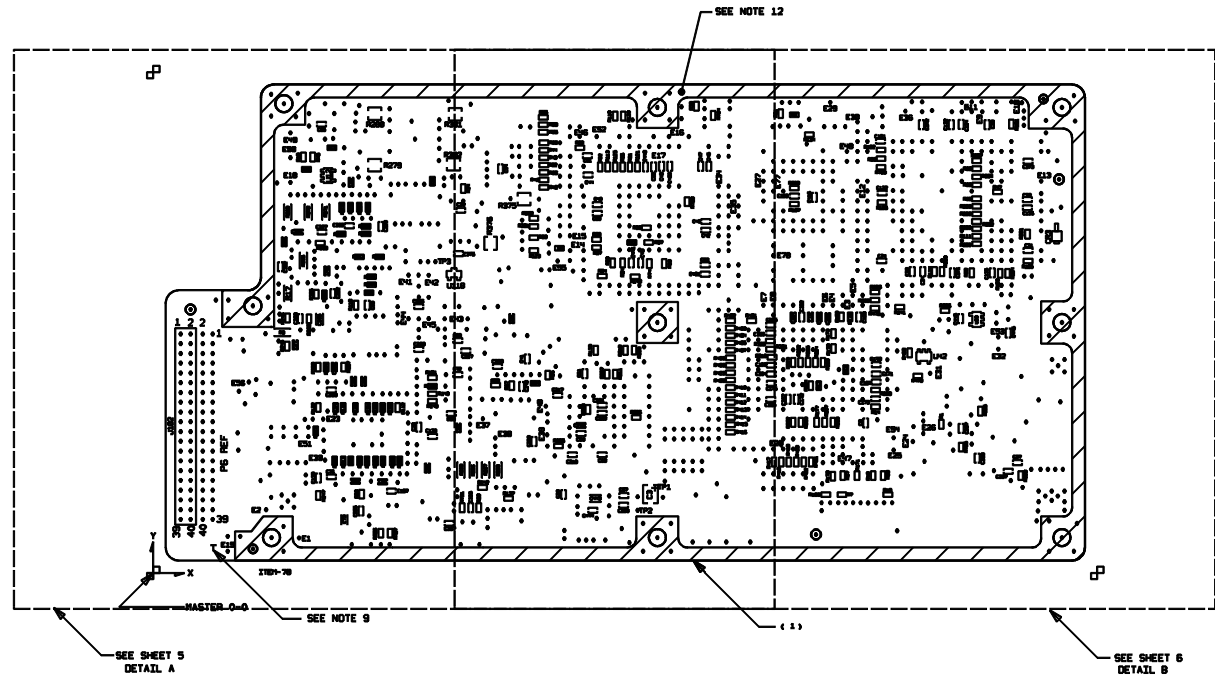
|     |                  |                    |   |
|-----|------------------|--------------------|---|
| 1   | 117 913-8889-100 | CAPACITOR, 62 pF   | C442  |
| 5   | 116 913-8885-680 | CAPACITOR, 1000 pF | C204,205,210,211,443  |
| 20  | 115 913-8885-500 | CAPACITOR, 0.01    | C7,10,20,29,37,42-45<br>55-61,100,357,361,<br>401,403,440,441   |
| 2   | 114 913-8885-470 | CAPACITOR, 5000 pF | C203,208  |
| 2   | 113 913-8885-460 | CAPACITOR, 4700 pF | C11,12  |
| 2   | 112 913-8885-450 | CAPACITOR, 3900 pF | C202,208  |
| 9   | 111 913-8885-360 | CAPACITOR, 1000 pF | C67,68,71,197,225,<br>391,394,395,399   |
| 1   | 110 913-8885-350 | CAPACITOR, 500 pF  | C66   |
| 1   | 109 913-8885-300 | CAPACITOR, 220 pF  | C41   |
| 1   | 108 913-8885-280 | CAPACITOR, 100 pF  | C36   |
| 11  | 107 913-8885-260 | CAPACITOR, 100 pF  | C25-27,81,83-85,230,<br>322,326,327   |
| 1   | 106 913-8885-230 | CAPACITOR, 56 pF   | C54   |
| 4   | 105 913-8885-160 | CAPACITOR, 15 pF   | C114,115,140,149  |
| 4   | 104 913-8885-140 | CAPACITOR, 10 pF   | C110,119,152,153  |
| 111 | 103 913-8883-050 | CAPACITOR, 0.1     | C1,9,15-17,19-22,24,<br>30-34,36,39,40,46-53<br>63,72,76,78,80,82,88<br>91-95,109,121,122,<br>124,132-136,139-141,<br>143,158-161,164-173,<br>175,177,178,183,195,<br>200,201,206,207,<br>217-221,226-229,235,<br>267,319,330,358,<br>362-373,375,390,396,<br>397,410,424,444-446 |
| 1   | 102 859-5534-220 | CONN,ELEC          | J1  |
| 2   | 101 859-4820-000 | CONN,ELEC          | J102,103  |
| 1   | 100 849-2582-060 | XFRM, 2-40 MHz     | T2  |

| QTY   | ITEM | PART OR IDENT. NO. | NOMENCLATURE OR DESCRIPTION | NOTES | REF DESIGNATORS |
|---|------|--------------------|-----------------------------|-------|-----------------|
| PARTS LIST (US CUSTOMARY MEASUREMENTS ONLY) |      |                    |                             |       |                 |

ROCKWELL COLLINS, INC  
100 COLLINS ROAD NE, GERRARD STATION, G0W00

|  |             |                      |        |
|--|-------------|----------------------|--------|
| DESIGNED BY: COLLETTE                            | DATE: 4V792 | DWG NO: 828-3311-002 | REV: - |
| ROCKWELL PROPRIETARY INFORMATION. CHK. BY: FABRY | SCALE: NONE | SHEET: 2             |        |

DIGITAL DATA ONLY, NO PAPER TRACING.



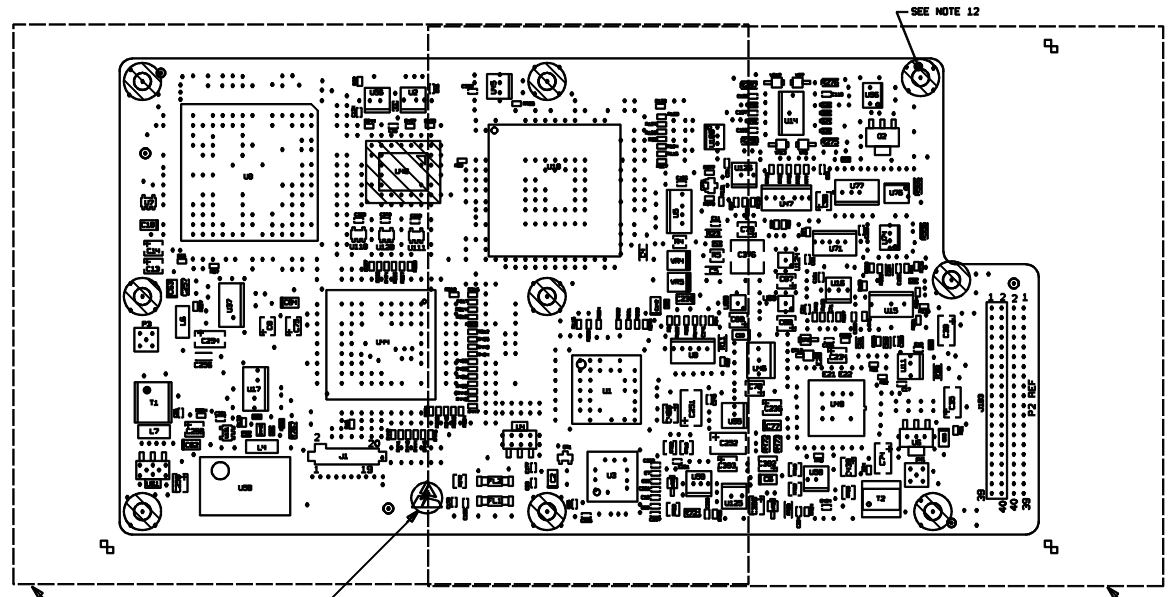
**ROCKWELL COLLINS, INC**

100 COLLINS ROAD NE, GAITHERSBURG, MD 20878

|                                    |                 |                         |             |
|------------------------------------|-----------------|-------------------------|-------------|
| PREP<br>D. COLLETTE<br>14-Sep-2001 | CHK<br>H. FERRY | DRG NO.<br>828-3311-002 | REV<br>1.00 |
| SCALE<br>NONE                      |                 | SHEET<br>3              |             |

ROCKWELL PROPRIETARY INFORMATION.

DIGITAL DATA ONLY, NO MASTER TRACING.

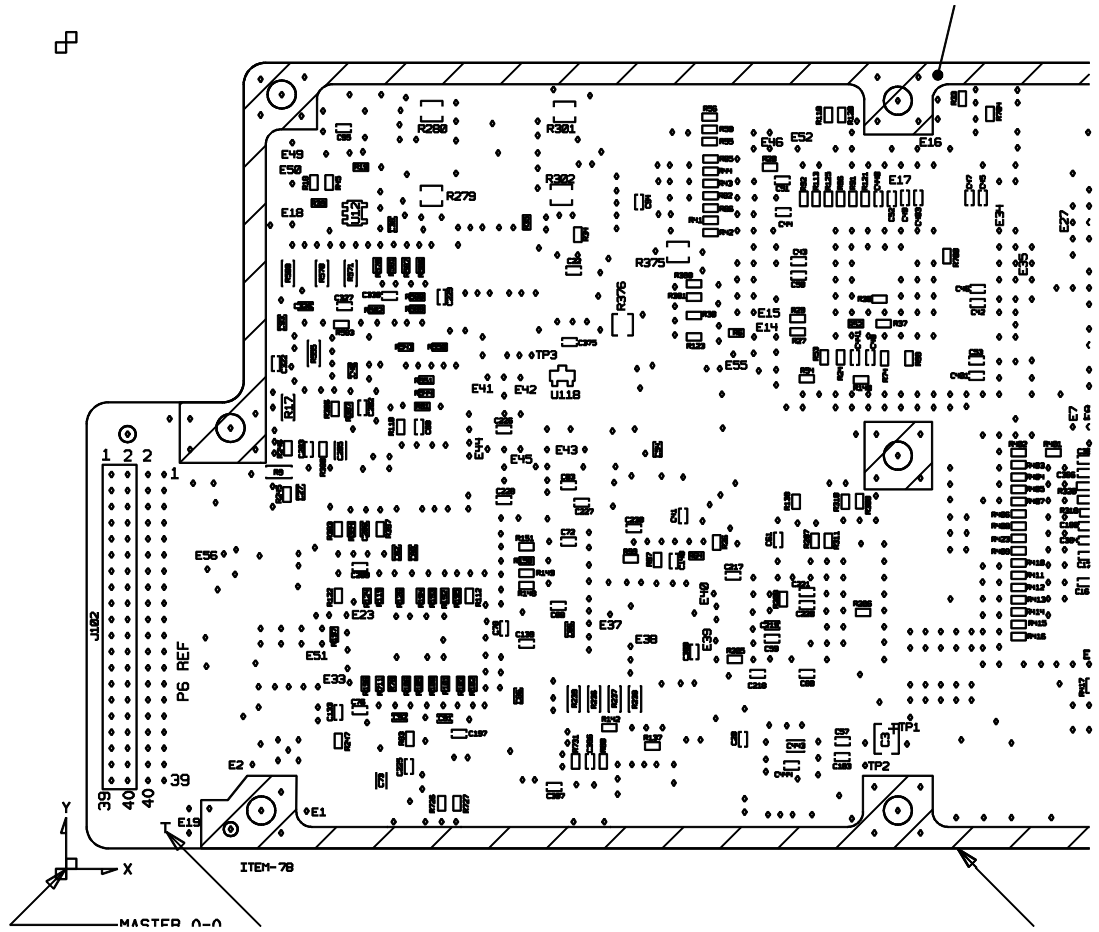


BOTTOM COMPONENTS

ROCKWELL COLLINS, INC  
100 COLLINS ROAD NE, GAITHERSBURG MD, 20878

|                                    |                 |                         |            |
|------------------------------------|-----------------|-------------------------|------------|
| PREP<br>D. COLLETTE<br>14-Sep-2001 | CHK<br>H. FERRY | DRG NO.<br>828-3311-002 | REV<br>1.0 |
| ROCKWELL PROPRIETARY INFORMATION.  |                 | SCALE<br>NONE           | SHEET<br>4 |

DIGITAL DATA ONLY, NO PAPER TRACING.

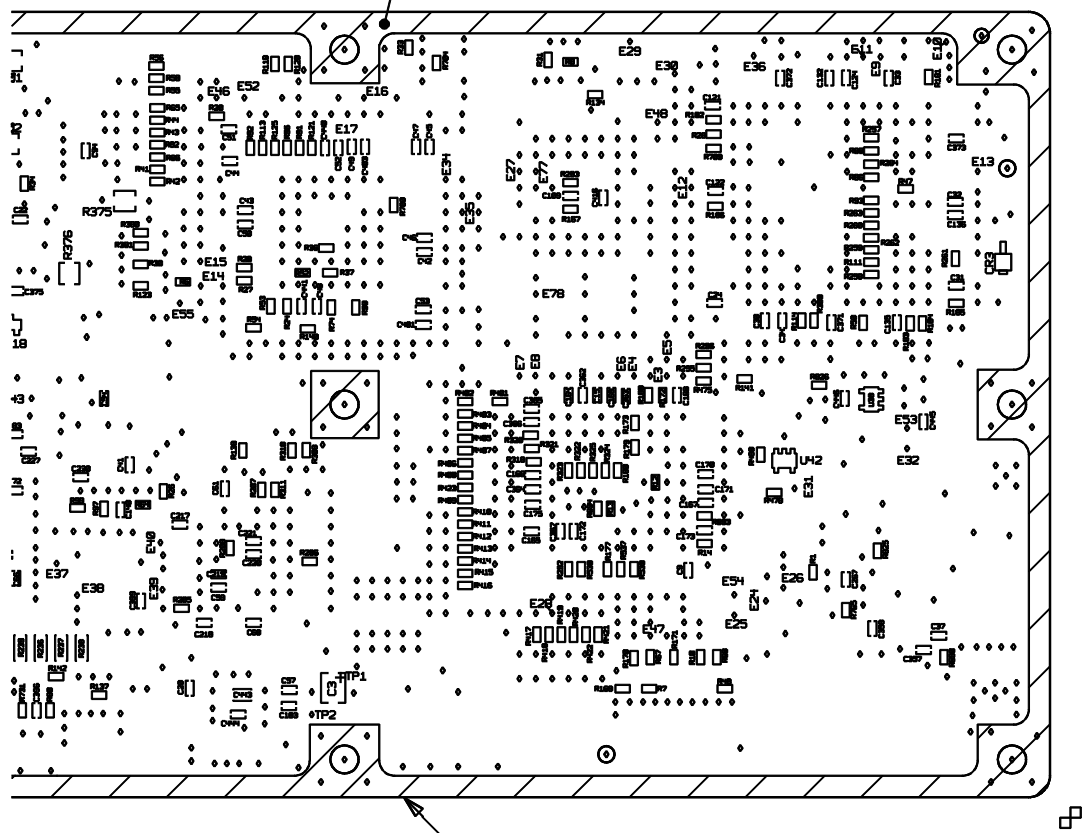


ASSEMBLY DETAIL A

ROCKWELL COLLINS, INC  
 100 COLLINS ROAD NE, GAITHERSBURG MD, 20878

|                                    |                 |                         |             |
|------------------------------------|-----------------|-------------------------|-------------|
| PREP<br>D. COLLETTE<br>14-Sep-2001 | CHK<br>H. FERRY | DRG NO.<br>828-3311-002 | REV<br>1.00 |
| ROCKWELL PROPRIETARY INFORMATION.  |                 | SCALE<br>NONE           | SHEET<br>5  |

DIGITAL DATA ONLY, NO MASTER TRACING.

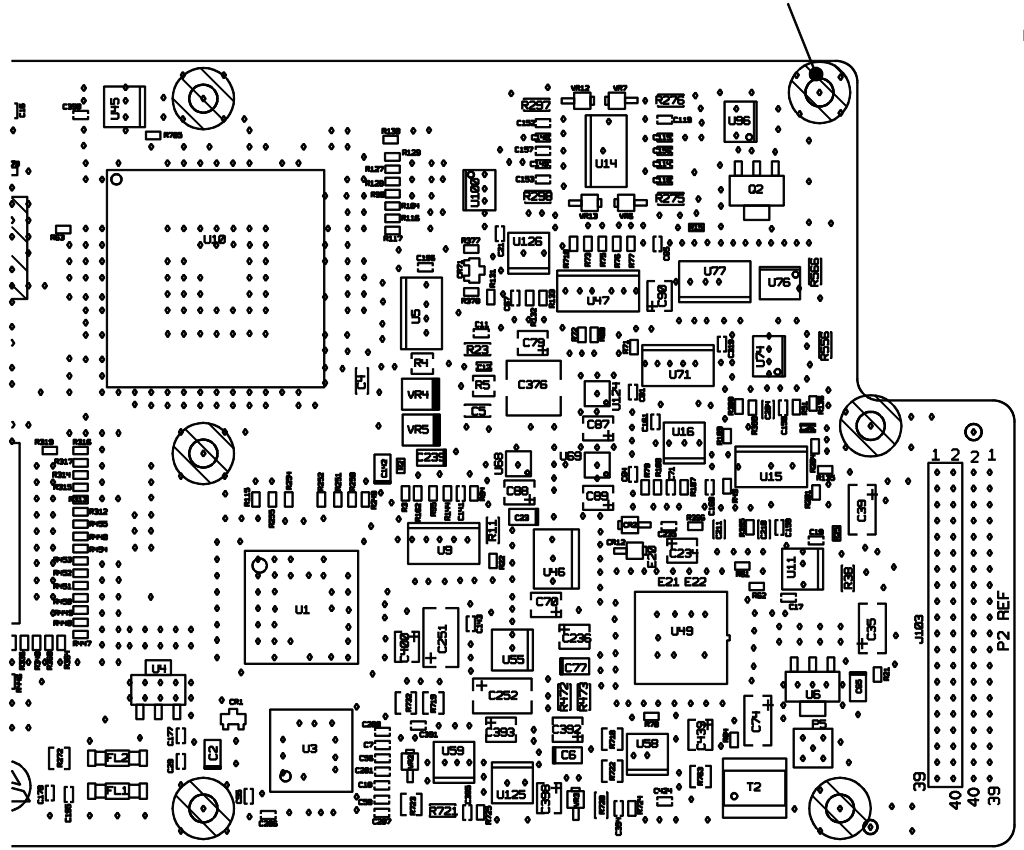


ASSEMBLY DETAIL B

ROCKWELL COLLINS, INC  
 100 COLLING ROAD NE, CEDAR RAPIDS IA, IA 52408

|                                    |                 |                         |              |
|------------------------------------|-----------------|-------------------------|--------------|
| PREP<br>D. COLLETTE<br>14-Sep-2001 | CHK<br>H. FERRY | DRG NO.<br>828-3311-002 | REV<br>LTH - |
| ROCKWELL PROPRIETARY INFORMATION.  |                 | SCALE<br>NONE           | SHEET<br>6   |

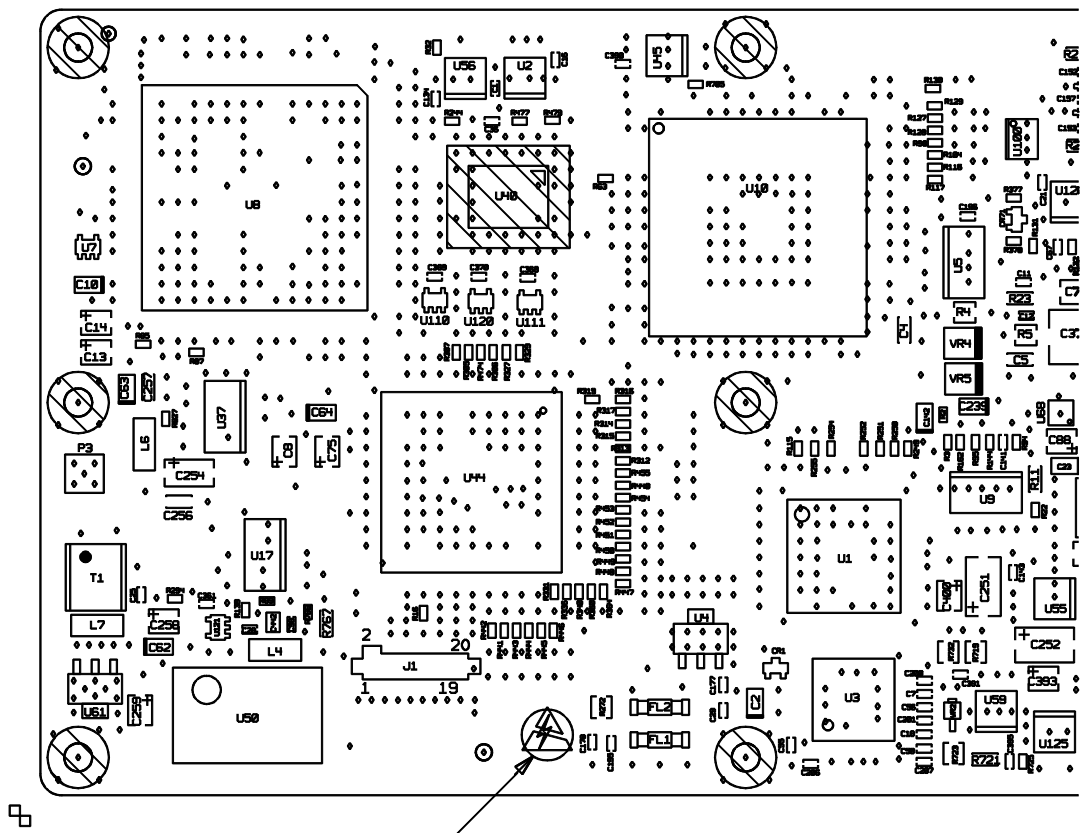
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ASSEMBLY DETAIL C

|  |                 |                         |               |
|--|-----------------|-------------------------|---------------|
| ROCKWELL COLLINS, INC<br>100 COLLINS ROAD NE, GAITHERSBURG 20878 |                 |                         |               |
| PREP<br>D. COLLETTE<br>14-Sep-2001                               | CHK<br>H. FERRY | SKETCH<br>D 4V792       | SCALE<br>NONE |
| ROCKWELL PROPRIETARY INFORMATION.                                |                 | DWG NO.<br>828-3311-002 | REV<br>LTH -  |
|  |                 | SHEET 7                 |               |

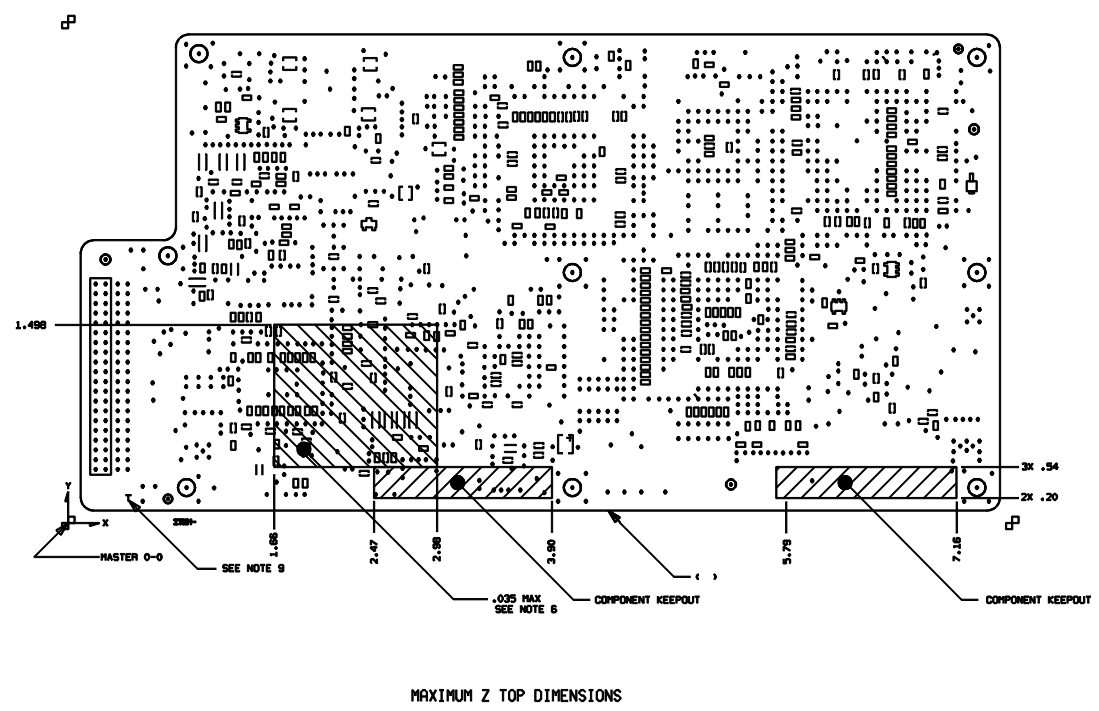
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|                                   |              |  |              |
|-----------------------------------|--------------|--|--------------|
| ROCKWELL PROPRIETARY INFORMATION. |              | ROCKWELL COLLINS, INC<br>100 COLLINS ROAD NE, GAITHERSBURG 20878 |              |
| PREP D. COLLETTE<br>14-Sep-2001   | CHK H. FERRY | DRG NO.<br>D 4V792   | REV<br>LTM - |
| SCALE NONE                        |              | SHEET 8  |              |

DIGITAL DATA ONLY, NO PAPER TRACING.



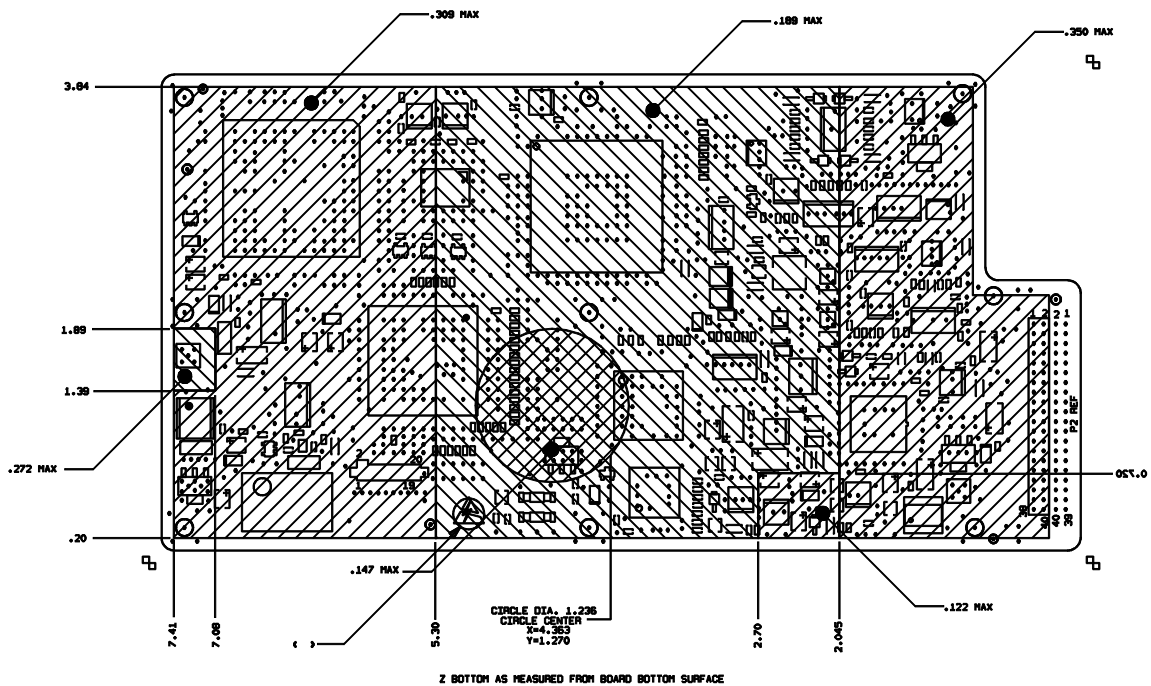


MAXIMUM Z TOP DIMENSIONS

ROCKWELL COLLINS, INC  
1900 COLLING ROAD NE, CEDAR RAPIDS IOWA, 52408

|  |                          |                         |              |
|--|--------------------------|-------------------------|--------------|
| PREP D. COLLETTE<br>14-Sep-2001                | DRK   CRK CRK<br>D 4V792 | DWG NO.<br>828-3311-002 | REV<br>178 - |
| ROCKWELL PROPRIETARY INFORMATION. CHK H. FERRY | SCALE NONE               | SHEET 9                 |              |

DIGITAL DATA ONLY, NO MASTER TRACING.



MAXIMUM Z BOTTOM DIMENSIONS

ROCKWELL COLLINS, INC  
 1900 COLLINGS ROAD NE, CEDAR RAPIDS IOWA, 52408

|  |                          |                         |               |
|--|--------------------------|-------------------------|---------------|
| PREP R. COLLETTE<br>14-Sep-2001                | DRK   CRK CRK<br>D 4V792 | DWG NO.<br>828-3311-002 | REV<br>1/01 - |
| ROCKWELL PROPRIETARY INFORMATION. CHK H. FERRY | SCALE NONE               | SHEET 10                |               |

DIGITAL DATA ONLY, NO PAPER TRACING.