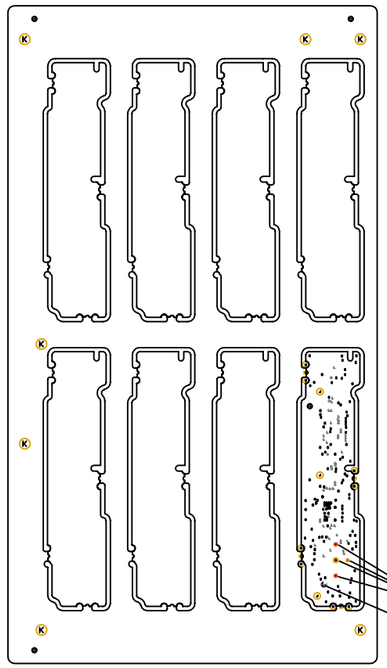
| REV | DESCRIPTION | LOC | DCN# | DATE | CK. | AP. | DR. |
|---|---|---|---|---|---|---|---|
| A | PRODUCTION RELEASE | | 100103 | 01/06/10 | AG | MD | CV |
| B | PRODUCTION RELEASE | | 100144 | 03/03/10 | AG | MD | CV |




Through Holes
Harman/Becker Drill Chart

| Symbol | Diameter (mm) | Tolerance (mm) | Plated | Quantity |
|---|---|---|---|---|
| B | 0.80 | | Yes | 10 |
| C | 0.85 | | Yes | 107 |
| D | 1.00 | +0.05 / -0.08 | Yes | 2 |
| E | 1.10 | +0.05 / -0.08 | No | 1 |
| F | 1.55 | | No | 1 |
| G | 1.60 | +0.05 / -0.08 | No | 1 |
| H | 2.50 | | No | 3 |
| J | 3.00 | | No | 2 |
| K | 4.00 | | No | 7 |

NC Drill Chart Span I-K
Harman/Becker Drill Chart

| Symbol | Diameter (mm) | Tolerance (mm) | Plated | Quantity |
|---|---|---|---|---|
| A | 0.20 | | Yes | 21 |

NC Drill Chart Span B-G
Harman/Becker Drill Chart

| Symbol | Diameter (mm) | Tolerance (mm) | Plated | Quantity |
|---|---|---|---|---|
| L | 0.20 | | Yes | 31 |

## 6 LAYER STACKUP

LPI SOLDERMASK (TOP)
LAYER 1 (TOP) 36um Cu (1.0 OZ)
LAYER 2 36um Cu (1.0 OZ)
LAYER 3 36um Cu (1.0 OZ)
LAYER 4 36um Cu (1.0 OZ)
LAYER 5 36um Cu (1.0 OZ)
LAYER 6 (BOTTOM) 36um Cu (1.0 OZ)
LPI SOLDERMASK (BOTTOM)

1.57mm (0.062")
±0.18mm (0.007")

4 IDENTIFY FINISHED BOARD, IN ETCH, WITH APPLICABLE REVISION LEVEL PER PURCHASE ORDER AND DRAWING REVISION.

3 APPLY SILKSCREEN NOMENCLATURE PATTERN WITH WHITE EPOXY NON-CONDUCTIVE INK PER IPC-6011. USE PATTERN(S) SPECIFIED IN APPLICABLE COLUMN OF ARTWORK SCHEDULE.

2 LIQUID PHOTO IMAGEABLE (LPI) SOLDER RESIST SHALL BE ENTHONE 3241 (GREEN) OR TAIYO PSR-4000MH / PSR-4000EH.

1 FOLLOW THE COMPANY STANDARD FOR PRINTED CIRCUIT BOARDS, HBS 1071.556-033 PART 4, AND COMPANY STANDARD FOR PCB BASE MATERIAL, HBS 1071.556-033 SUPPLEMENT, EXCEPT THAT THE MATERIAL SHALL HAVE A MINIMUM OF 170°C Tg.

NOTES: UNLESS OTHERWISE SPECIFIED

THIRD ANGLE PROJECTION

| | | |
|---|---|---|
| 3 | 2164434_SMT | SOLDERMASK TOP SIDE |
| 3 | 2164434_SMB | SOLDERMASK BOTTOM SIDE |
| 2 | 2164434_TOP | LAYER 1 (TOP SIDE) |
| 2 | 2164434_L2 | LAYER 2 |
| 2 | 2164434_L3 | LAYER 3 |
| 2 | 2164434_L4 | LAYER 4 |
| 2 | 2164434_L5 | LAYER 5 |
| 2 | 2164434_BOT | LAYER 6 (BOTTOM SIDE) |
| | | |
| | 2164434_CONTOUR | CONTOURS |
| | 2164434_DRL | DRILL SYMBOLS |
| | ITEM NUMBER | DESCRIPTION |

ARTWORK SCHEDULE

| DASH NO. | QTY REQ | FSCM NO. | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | MATERIAL SPECIFICATION | FIND NO. |
|---|---|---|---|---|---|---|
| | - | - | 2164434 | FINISHED PRINTED CIRCUIT BOARD | - | - |

SHEET: 1 OF 2
SCALE: NONE
SHEET SIZE: D
FIRST USED:
MODEL FILE:
DRAWING FILE:
REF DRAWING NO:

TOOLING PURPOSES ONLY
CAPABILITY STUDY REQUIRED AT FPAP
CAPABILITY STUDY REQUIRED AT FPAP ONGOING INSPECTION REQUIRED (STATED IN CONTROL PLAN)
CAPABILITY STUDY REQUIRED AT FPAP ONGOING SPC DATA REQUIRED PROCESS CAPABILITY INDEX Cpk≥1.33 REQUIRED
PLUS DRAFT
MINUS DRAFT
DRAFT INCLUDED
CUSTOMER REQUIRED

DIMENSIONS IN MILLIMETERS
UNLESS OTHERWISE SPECIFIED
X.X = ±0.5 X.XX = ±0.50
X.XXX = ±0.130 ANGLES = ±.5°

UNLESS OTHERWISE SPECIFIED THE FOLLOWING SPECS WILL APPLY:
N/A

MATERIAL: SEE NOTES 1
FINISH: SEE NOTES 1

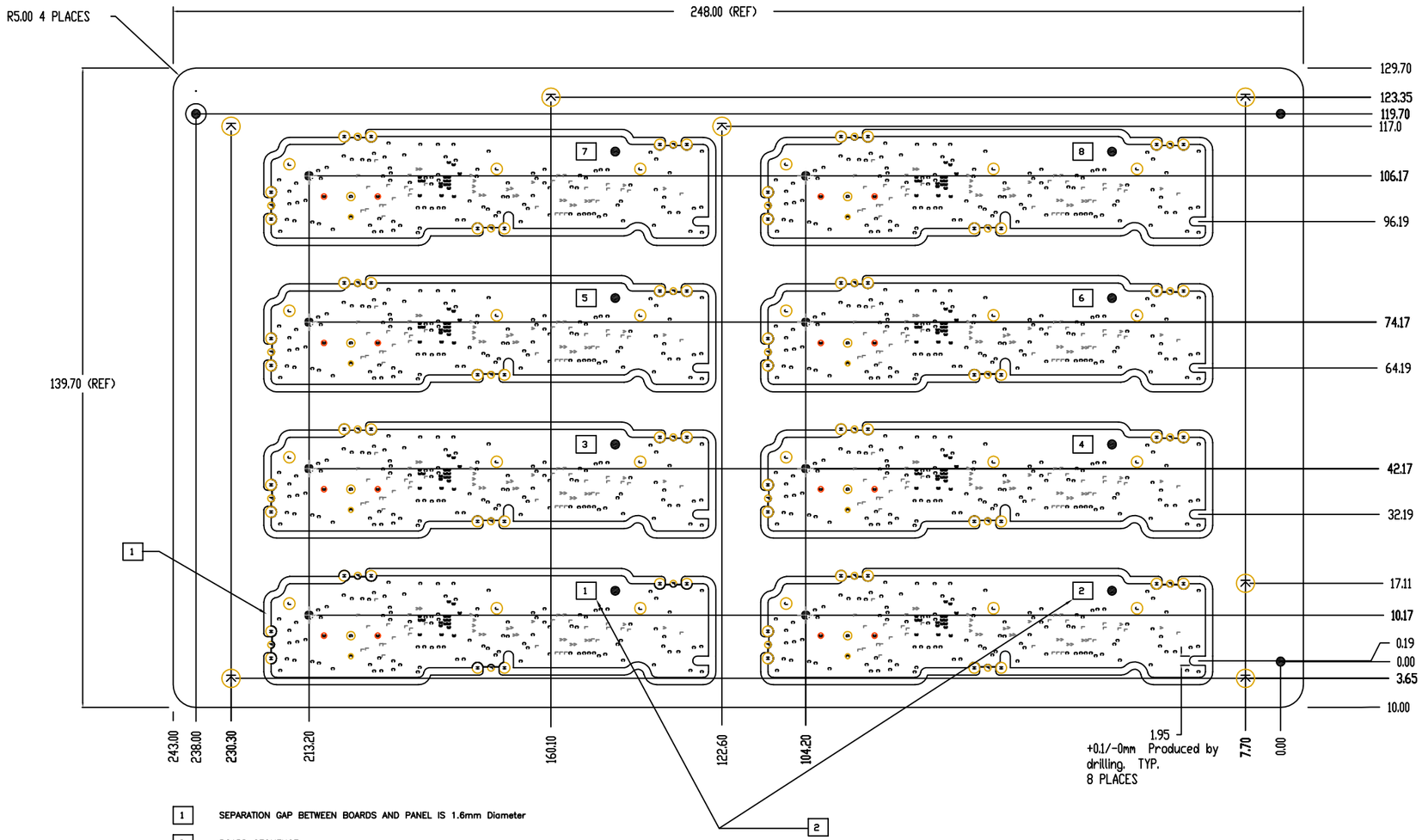
HARMAN/BECKER AUTOMOTIVE SYSTEMS NORTH AMERICA



REF. DRAWING STANDARDS: ANSI/ASME Y 14.5M

NAME: PCB 9091 LEFT 03AA 6844
DRAWING NUMBER: 2164434
REV.: B

| REV | DESCRIPTION | LOC | DCN# | DATE | CK. | AP. | DR. |
|---|---|---|---|---|---|---|---|
| | SEE SHEET 1 | | | | | | |




| DASH NO. | QTY REQ | FSCM NO. | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | MATERIAL SPECIFICATION | FIND NO. |
|---|---|---|---|---|---|---|
| | - | - | 2164434 | FINISHED PRINTED CIRCUIT BOARD | - | - |

SHEET: 2 OF 2
SCALE: NONE
SHEET SIZE: D
FIRST USED:
MODEL FILE:
DRAWING FILE:
REF DRAWING NO.:

TOOLING PURPOSES ONLY
CAPABILITY STUDY REQUIRED AT PPAP
CAPABILITY STUDY REQUIRED AT PPAP; ONGOING INSPECTION REQUIRED STATED IN CONTROL PLANS
CAPABILITY STUDY REQUIRED AT PPAP; ONGOING SPC DATA REQUIRED; PROCESS CAPABILITY INDEX Cpk≥1.33 REQUIRED
PLUS SHAFT
MINUS SHAFT
SHAFT INCLUDED
CUSTOMER REQUIRED

DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
X.X = ±0.5 X.XX = ±0.30
XXXX = ±0.130 ANGLES = ±.5°

UNLESS OTHERWISE SPECIFIED THE FOLLOWING SPECS WILL APPLY:
N/A

MATERIAL: SEE NOTES

FINISH: SEE NOTES

HARMAN/BECKER AUTOMOTIVE SYSTEMS
NORTH AMERICA



REF. DRAWING STANDARDS: ANSI/ASME Y 14.5M

NAME: PCB 9091 LEFT 03AA 6844

DRAWING NUMBER: 2164434

REV.: B

THIRD ANGLE PROJECTION