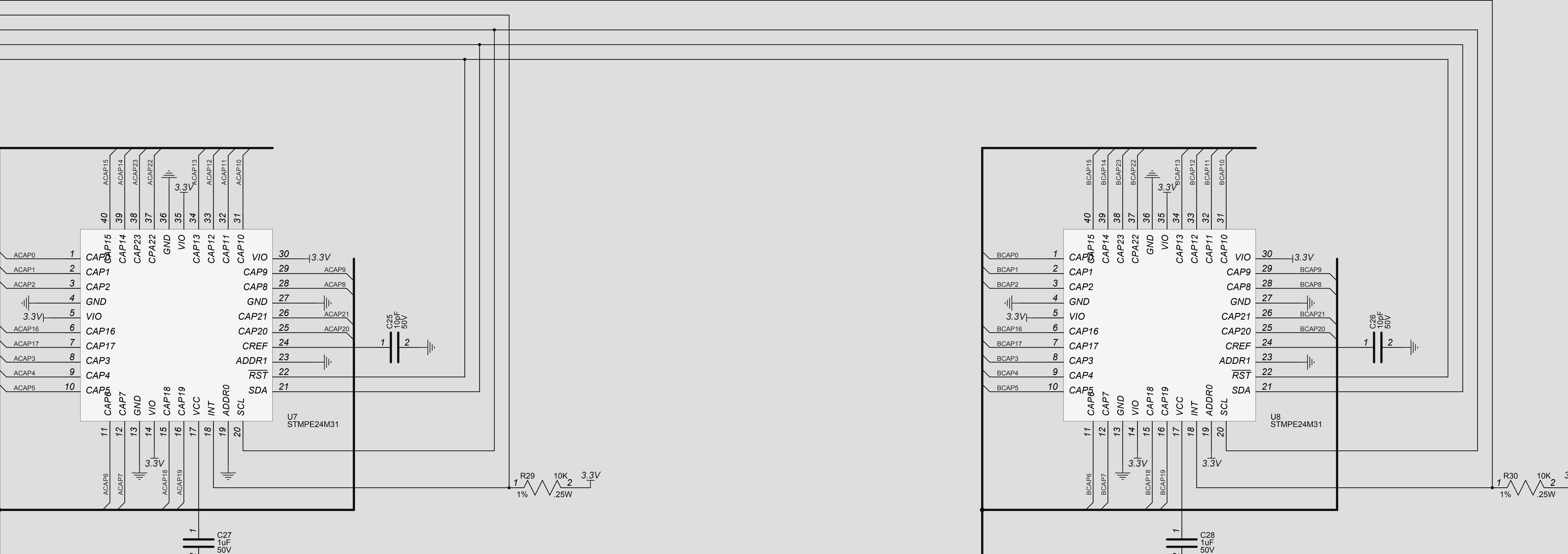
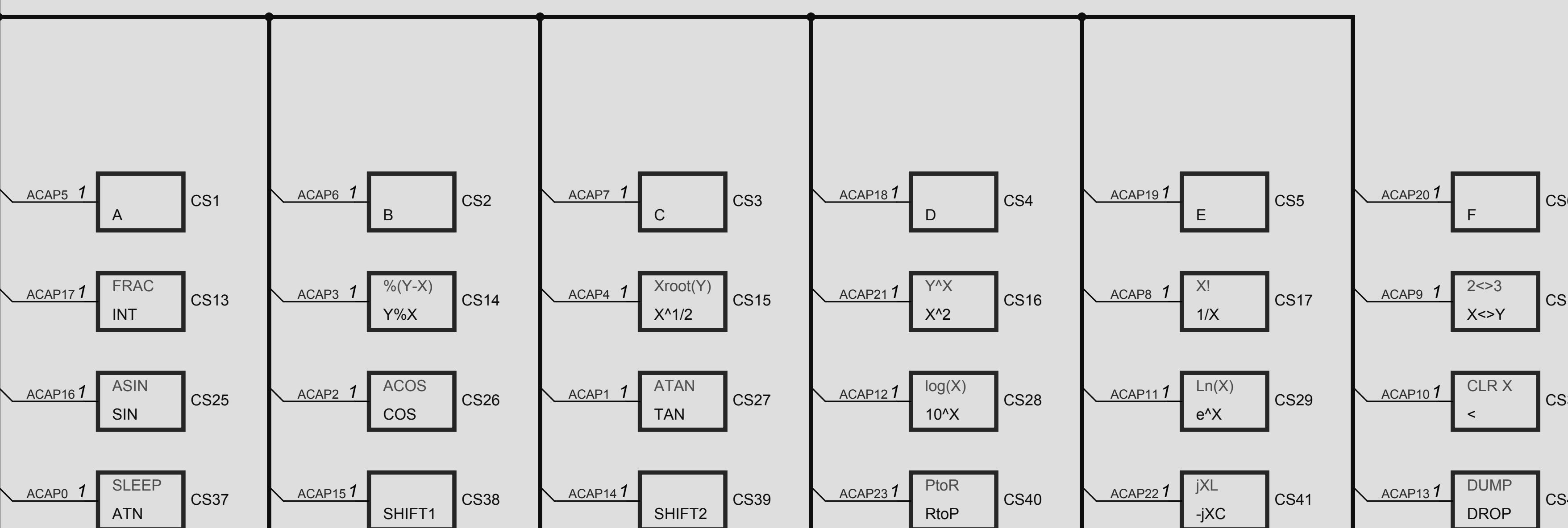


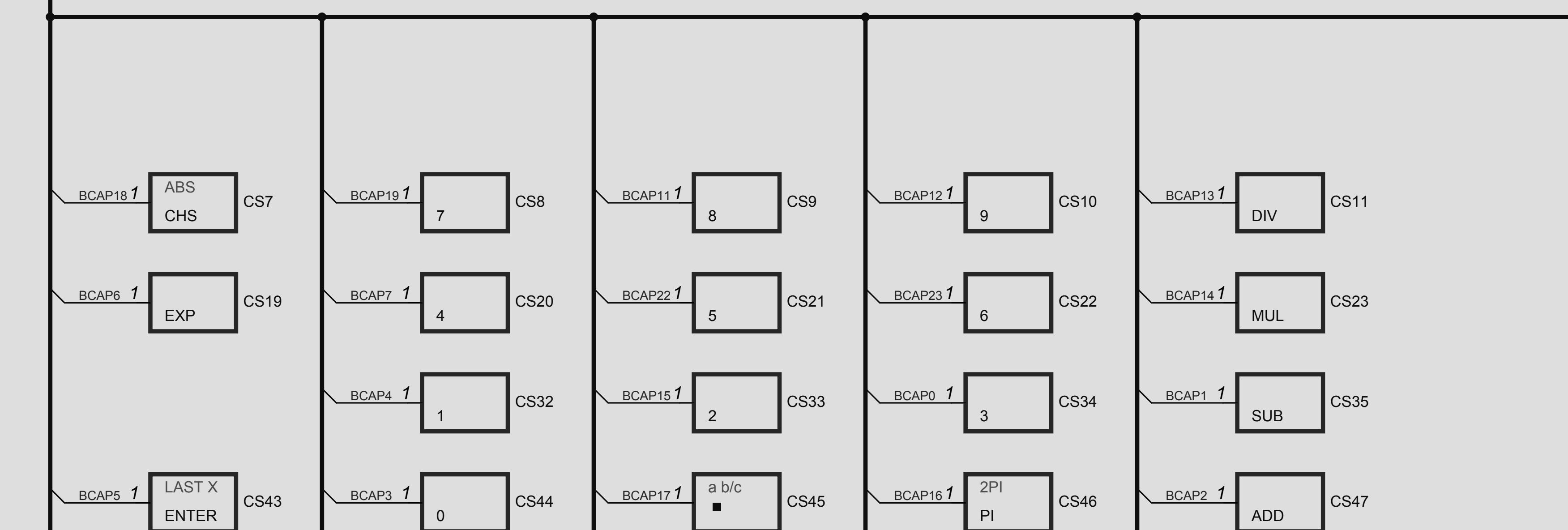
INT BCAP
INT ACAP
SCL0
SDAO
SYS RST



A CAP TOUCH

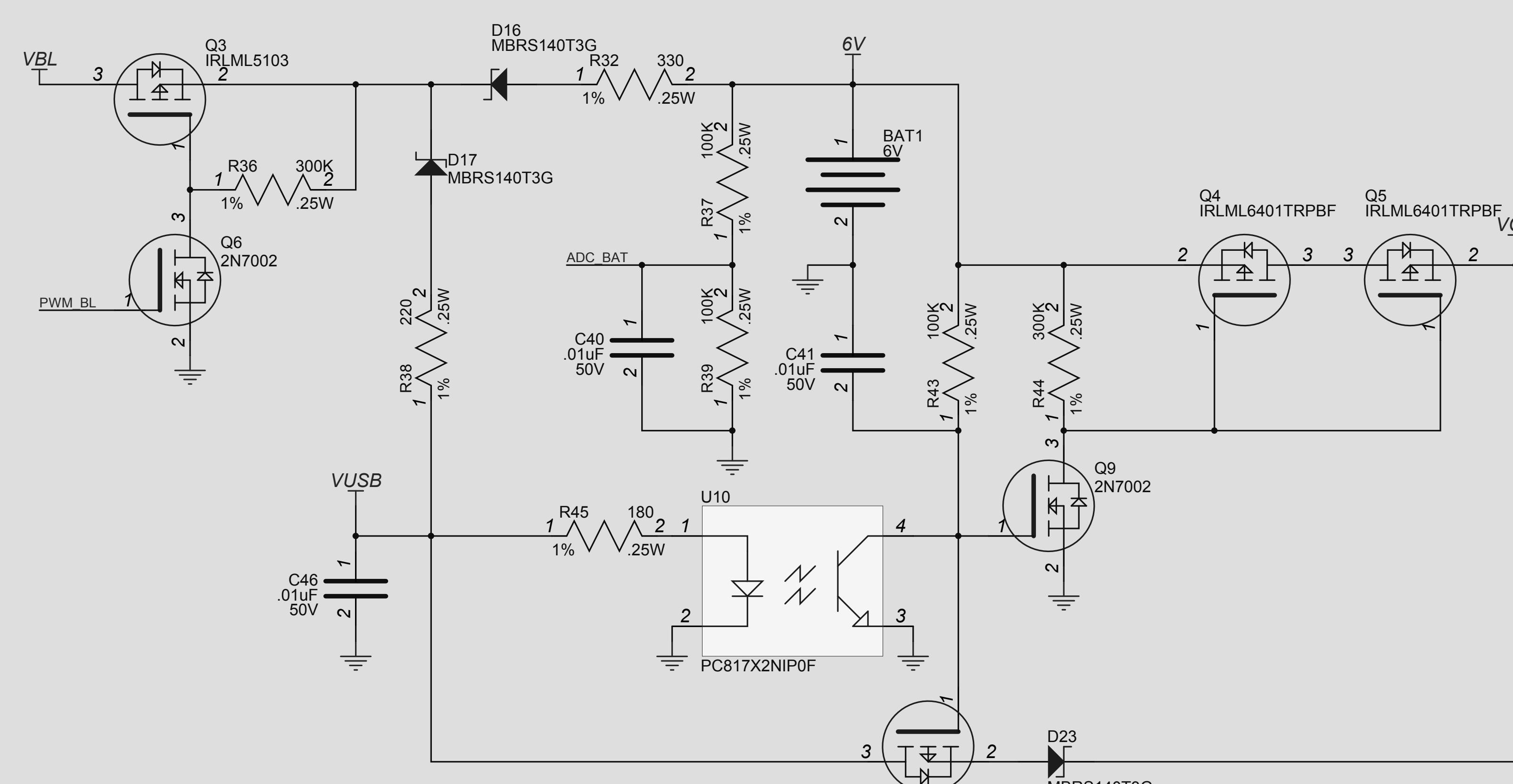


B CAP TOUCH



This circuit diagram illustrates a power supply stage with the following components and connections:

- Power Input:** A 3.3V source is connected to the drain of Q1 (IRLML5103) and the collector of Q15 (2N7002).
- Protection Diodes:** D15 (BZX84C18LT1G) and D20 (BZX84C33LT1G) are connected across the power input lines.
- Reference Voltage:** V_{REF30} is generated by Q10 (IRLML5103) with resistors R50 (1% 0.25W), R51 (1% 0.25W), and R52 (1% 0.25W).
- Current Control:** The SEL V/C signal controls the biasing of Q16 (IRLML2803) via resistor R56 (1% 0.25W).
- Feedback Path:** A feedback loop is formed by Q15 (2N7002), Q16 (IRLML2803), and Q17 (2N7002) to regulate the output current.
- Output Stages:** The output is controlled by three IRLML2803 transistors (Q11, Q12, Q13) with resistive load networks (R47, R48, R49).
- Protection and Biasing:** Various diodes (D19, D21, D22) and resistors (R31, R33, R34, R35, R41, R42, R53, R54, R55) provide protection and biasing for the output stages.



HabWorks

Designed Electronic Solutions

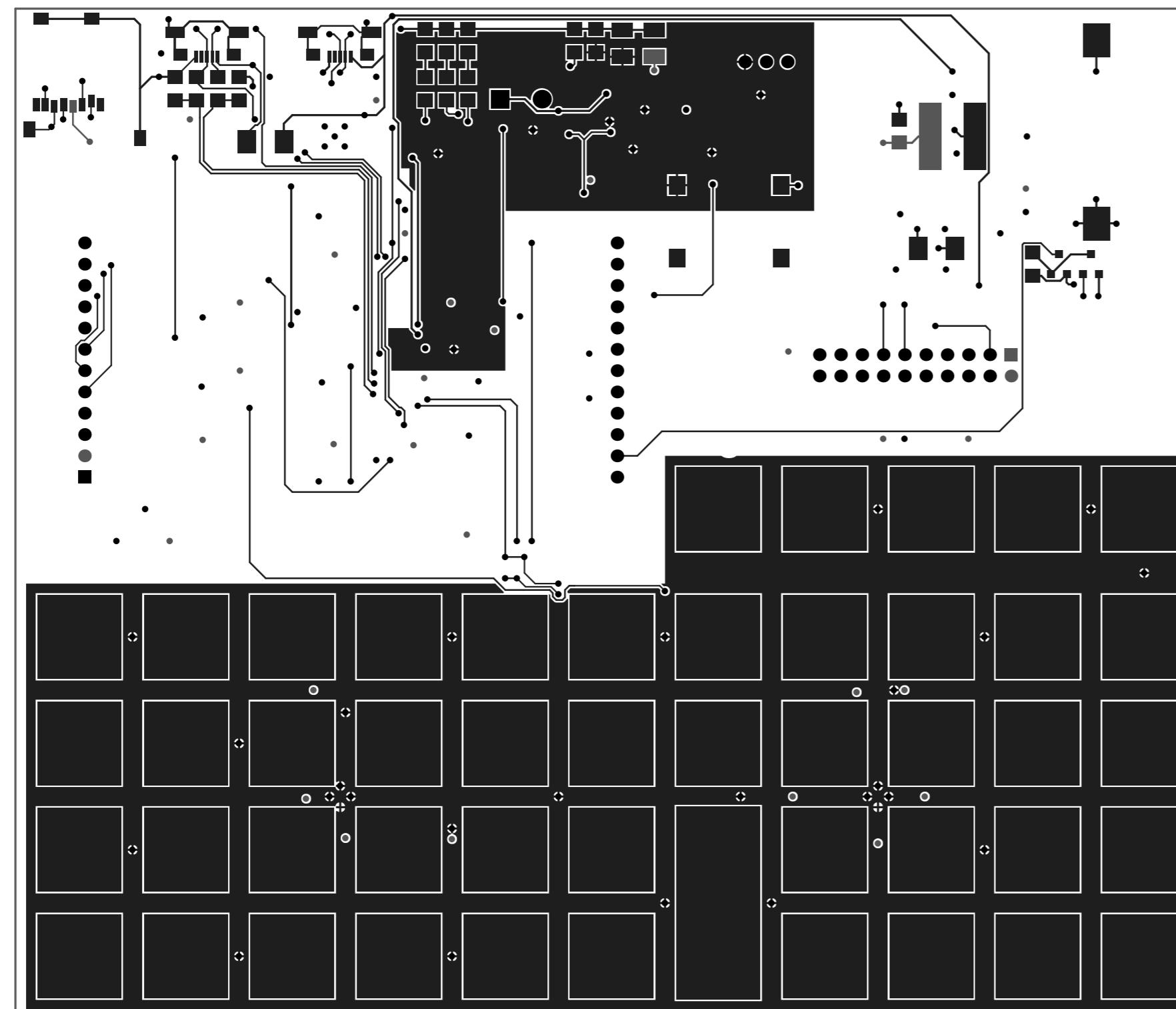
3621 GIN WAY

**TITLE: SCHEMATIC
MODEL: HC 15C
HAB'S 1ST GEN CALCULATOR**

SHEET: 3 OF 3

DRAWING #:

SCH-HC15C



TOP

HabWorks
Designed Electronic Solutions

THE INFORMATION HEREIN CONTAINED IS THE PROPERTY OF
SYNERGY LIGHTING CONTROLS AND IS TO BE HELD IN

| | | | | | | | | | | | | | |
|-----|-----|------------------|--|----------|-----|-----|-----|-----|-----|------------------|------|-----|-----|
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| | | | | | | | | | | | | | |
| A | | | | | | | | | | | | | |
| 1 | NA | NA | | 06/15/11 | HSC | HSC | HSC | | | | | | |
| REV | ECO | ECO DESCRIPTION: | | DATE | DWR | CHK | APR | REV | ECO | ECO DESCRIPTION: | DATE | DWR | CHK |

SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS.
NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED
PCB TO BE MARKE 94V-0 BY PCB VENDOR

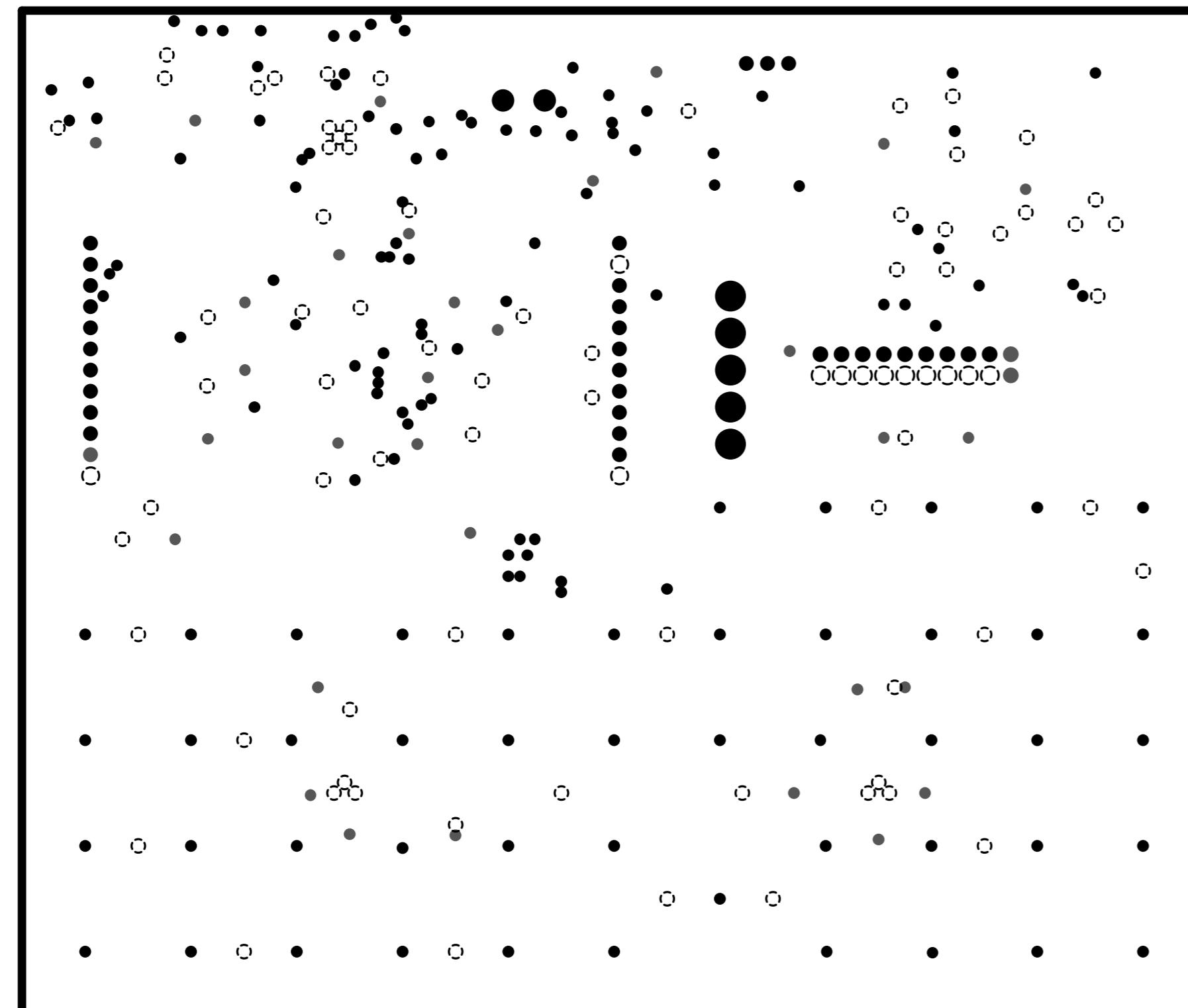
MATERIAL DESCRIPTION AND FINISH

TITLE:

—

| | | |
|--|-----|---|
| 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | 1:1 | 1 |
|--|-----|---|

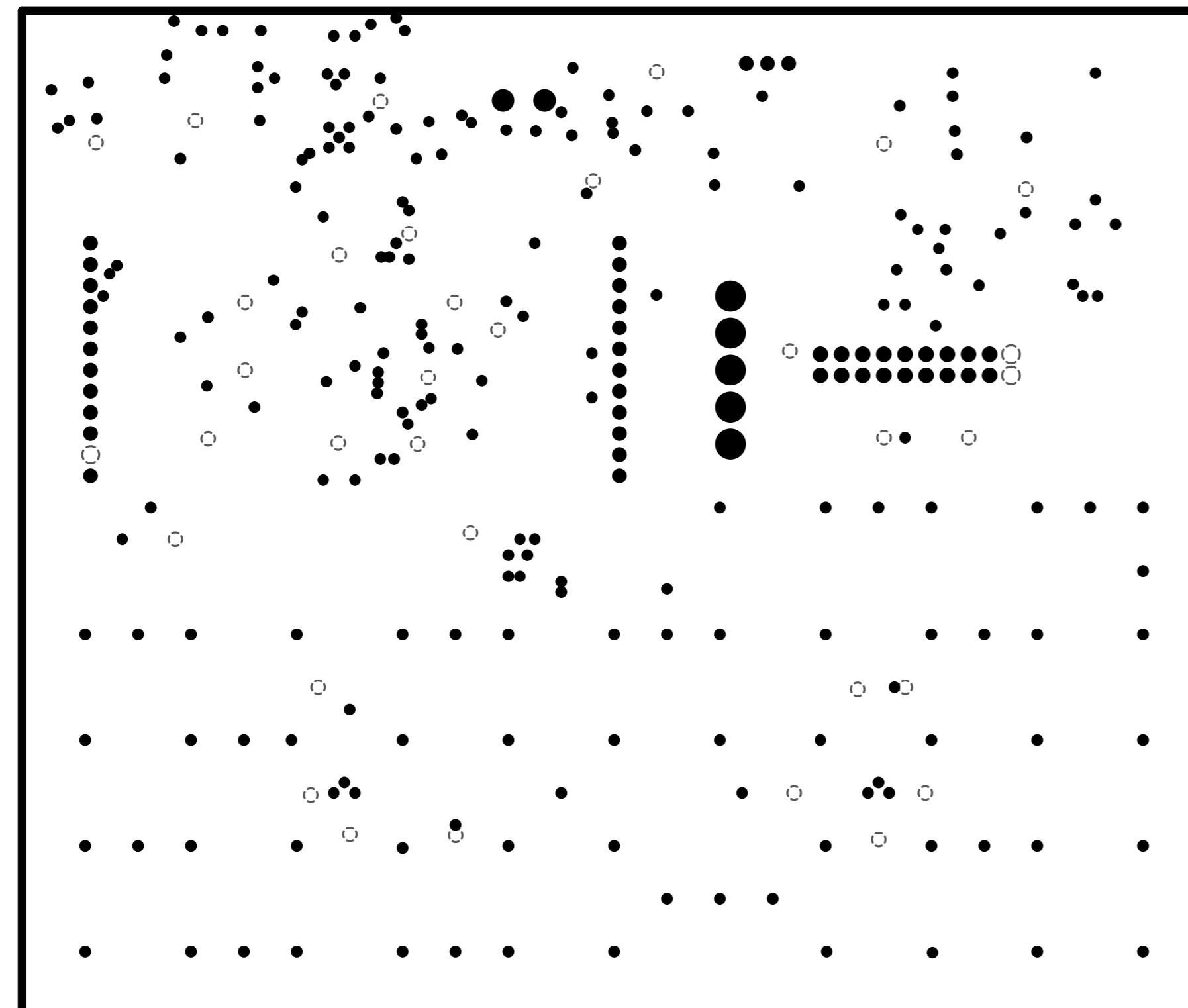
SHEET: OF:
DRAWING NO:
PCB-HC15C



PLANE 1 GND

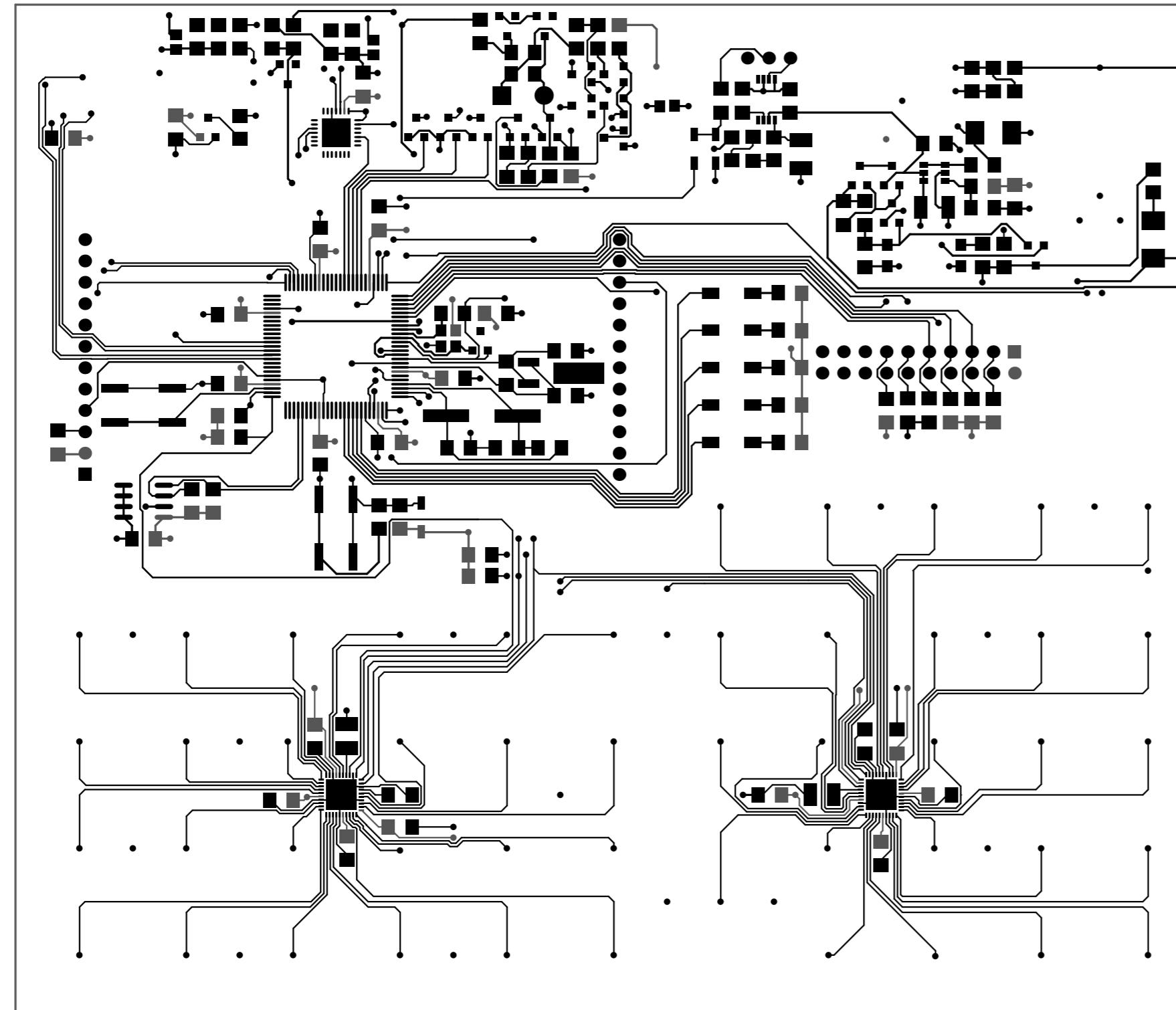
| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|--------------|------|-----|-----|-----|-----|-----|-----|--------------|---|-----|-----|-----|--|---------------------------------|
| | | | | | | | | | | | | SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS. NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED PCB TO BE MARKE 94V-0 BY PCB VENDOR | | | | 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | 1:1 |
| | | | | | | | | | | | | MATERIAL DESCRIPTION AND FINISH | | | | TOLERANCE UNLESS NOTED | SCALE |
| | | | | | | | | | | | | | | | | REV | |
| | | | | | | | | | | | | TITLE: | | | | SHEET: OF: | |
| | | | | | | | | | | | | MODEL: HC 15C | | | | DRAWING NO: | |
| | | | | | | | | | | | | PCB-HC15C | | | | FILETYPE: ALTIUM | FILETYPE: ALTIUM |
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| REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | FILENAME: PCB-HC15C_REV1.PcbDoc | FILENAME: PCB-HC15C_REV1.PcbDoc |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | FILETYPE: ALTIUM | FILETYPE: ALTIUM |

INFORMATION HEREIN CONTAINED IS THE PROPERTY OF
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COMPLETE CONFIDENCE.
REPRODUCED WITH WRITTEN CONSENT ONLY.



PLANE 2 3.3V

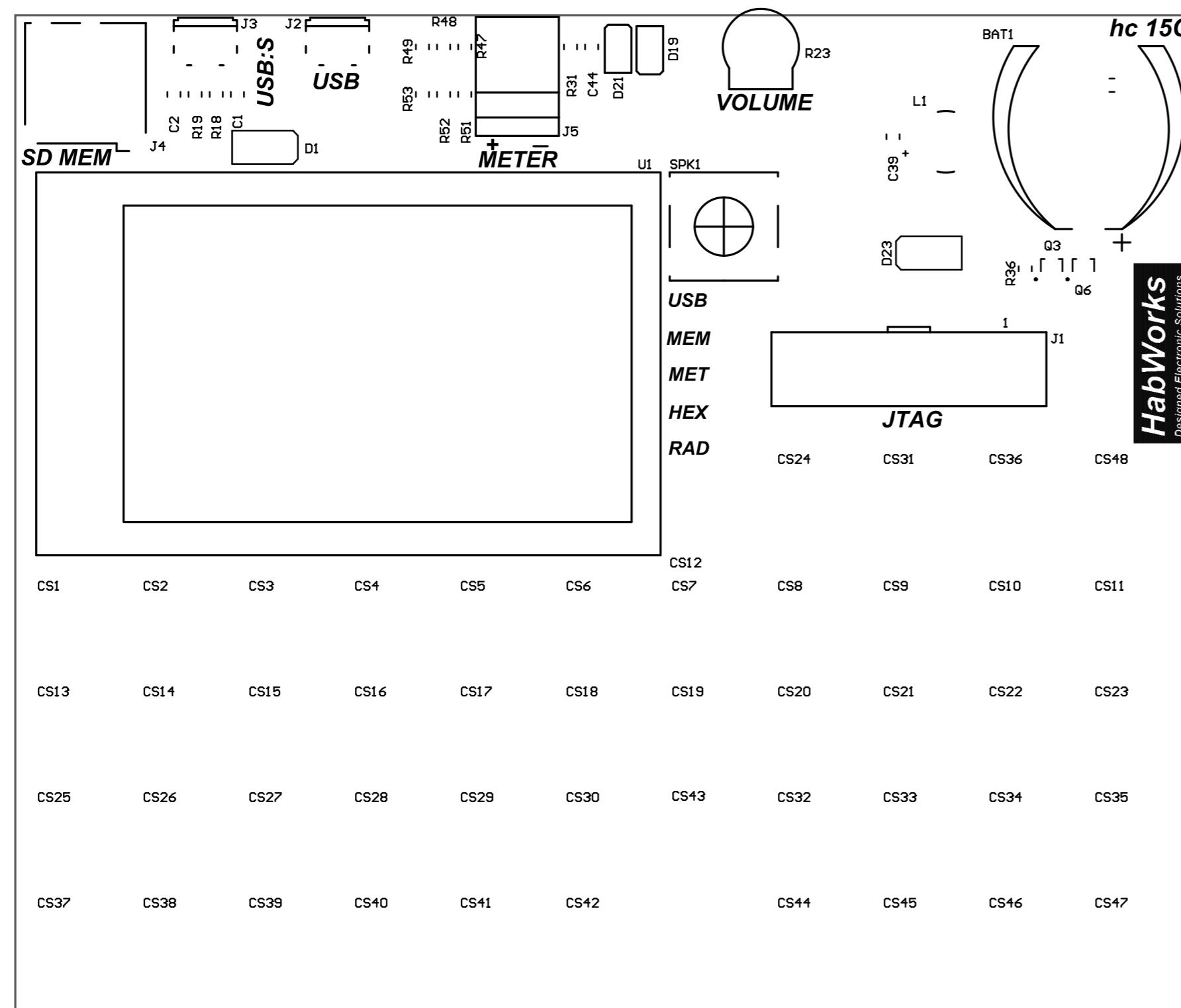
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|-----|-----|-----|--------------|------|-----|-----|-----|-----|-----|-----|--------------|--|-----|-----|-----|--|-------|
| | | | | | | | | | | | | SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL Specs. NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED PCB TO BE MARKE 94V-0 BY PCB VENDOR | | | | 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | 1:1 |
| | | | | | | | | | | | | MATERIAL DESCRIPTION AND FINISH | | | | TOLERANCE UNLESS NOTED | SCALE |
| | | | | | | | | | | | | | | | | REV | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | HabWorks Designed Electronic Solutions | | | | TITLE: MODEL: HC 15C | |
| | | | | | | | | | | | | SHEET: OF: DRAWING NO: PCB-HC15C | | | | FILETYPE: ALTIUM | |
| | | | | | | | | | | | | FILENAME: PCB-HC15C_REV1.PcbDoc | | | | SHEET: B SIZE | |
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| REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | 16 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | |



BOTTOM

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|--------------|------|-----|-----|-----|-----|-----|-----|--------------|---|-----|-----|-----|--|------------------|
| | | | | | | | | | | | | SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS. NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED PCB TO BE MARKE 94V-0 BY PCB VENDOR | | | | 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | 1:1 |
| | | | | | | | | | | | | MATERIAL DESCRIPTION AND FINISH | | | | TOLERANCE UNLESS NOTED | SCALE REV |
| | | | | | | | | | | | | TITLE: MODEL: HC 15C | | | | | |
| | | | | | | | | | | | | SHEET: OF: DRAWING NO: PCB-HC15C | | | | | |
| 1 | NA | NA | 06/15/11 | HSC | HSC | HSC | | | | | | HabWorks Designed Electronic Solutions | | | | | |
| REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | FILENAME:PCB-HC15C_REV1.PcbDoc | FILETYPE: ALTIUM |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | SHEET: B SIZE | |

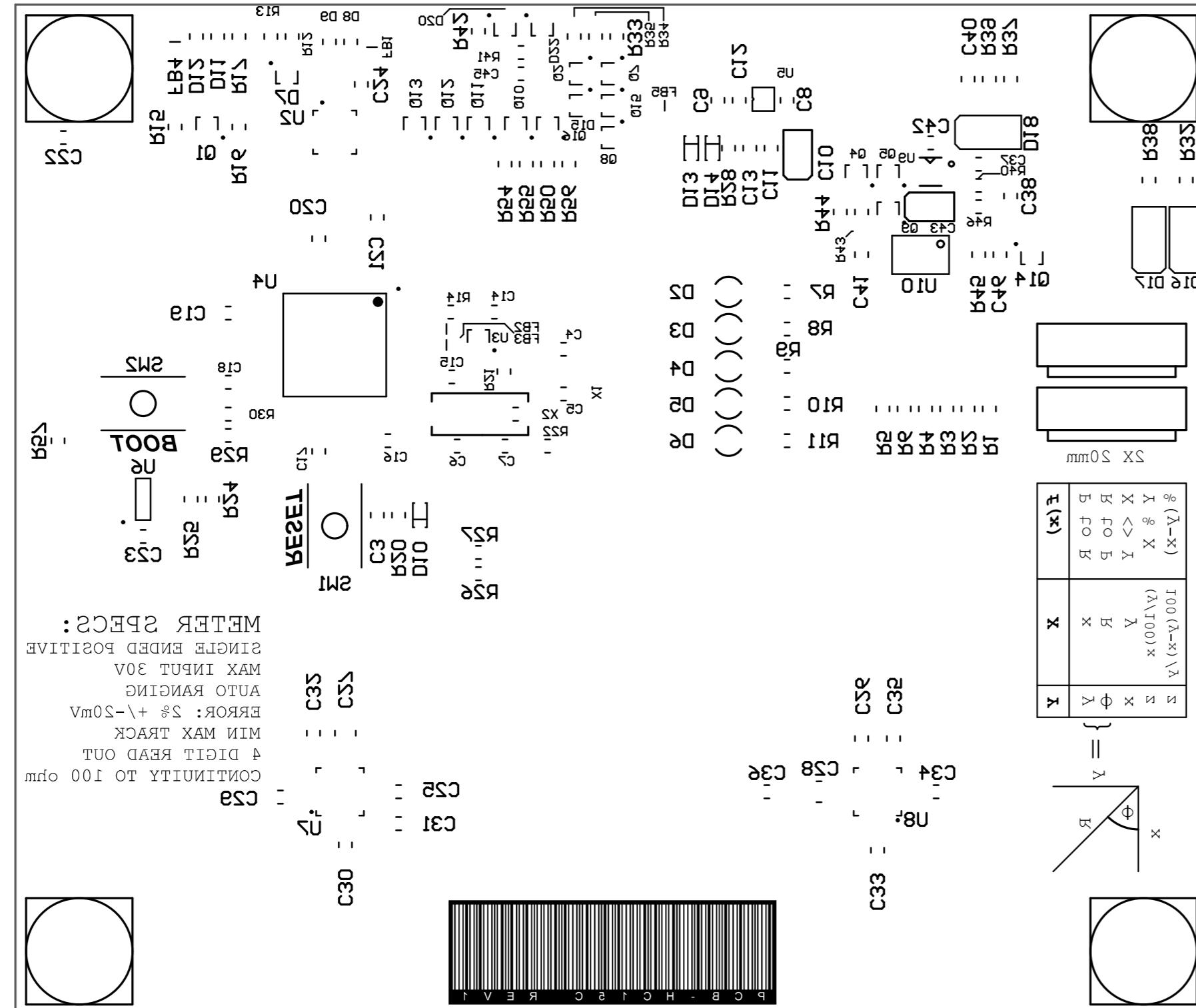
INFORMATION HEREIN CONTAINED IS THE PROPERTY OF
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COMPLETE CONFIDENCE.
REPRODUCED WITH WRITTEN CONSENT ONLY.



TOP SILK

| | | | | | | | | | | | | | | | |
|--|-----|------------------|----------|-----|-----|-----|-----|-----|------------------|------|-----|--|------------------|------------------|--|
| SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS. NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED PCB TO BE MARKE 94V-0 BY PCB VENDOR | | | | | | | | | | | | 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | 1:1 | 1 | |
| MATERIAL DESCRIPTION AND FINISH | | | | | | | | | | | | TOLERANCE UNLESS NOTED | SCALE | REV | |
| TITLE: | | | | | | | | | | | | SHEET: OF: | | | |
| MODEL: HC 15C | | | | | | | | | | | | DRAWING NO: | | | |
| PCB-HC15C | | | | | | | | | | | | FILETYPE: ALTIUM | FILETYPE: ALTIUM | FILETYPE: ALTIUM | |
| FILENAME: PCB-HC15C_REV1.PcbDoc | | | | | | | | | | | | FILETYPE: ALTIUM | FILETYPE: ALTIUM | FILETYPE: ALTIUM | |
| INFORMATION HEREIN CONTAINED IS THE PROPERTY OF SYNERGY LIGHTING CONTROLS AND IS TO BE HELD IN COMPLETE CONFIDENCE. REPRODUCED WITH WRITTEN CONSENT ONLY. | | | | | | | | | | | | FILETYPE: ALTIUM | FILETYPE: ALTIUM | FILETYPE: ALTIUM | |
| 1 | NA | NA | 06/15/11 | HSC | HSC | HSC | | | | | | HabWorks Designed Electronic Solutions | | | |
| REV | ECO | ECO DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO DESCRIPTION: | DATE | DWR | CHK | APR | | |

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BOTTOM SILK

SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS.
NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED
PCB TO BE MARKE 94V-0 BY PCB VENDOR

MATERIAL DESCRIPTION AND FINISH

2 PLACE DECIMAL +/-0.01
3 PLACE DECIMAL +/-0.005
ANGLES +/-2 DEG

1:1 1

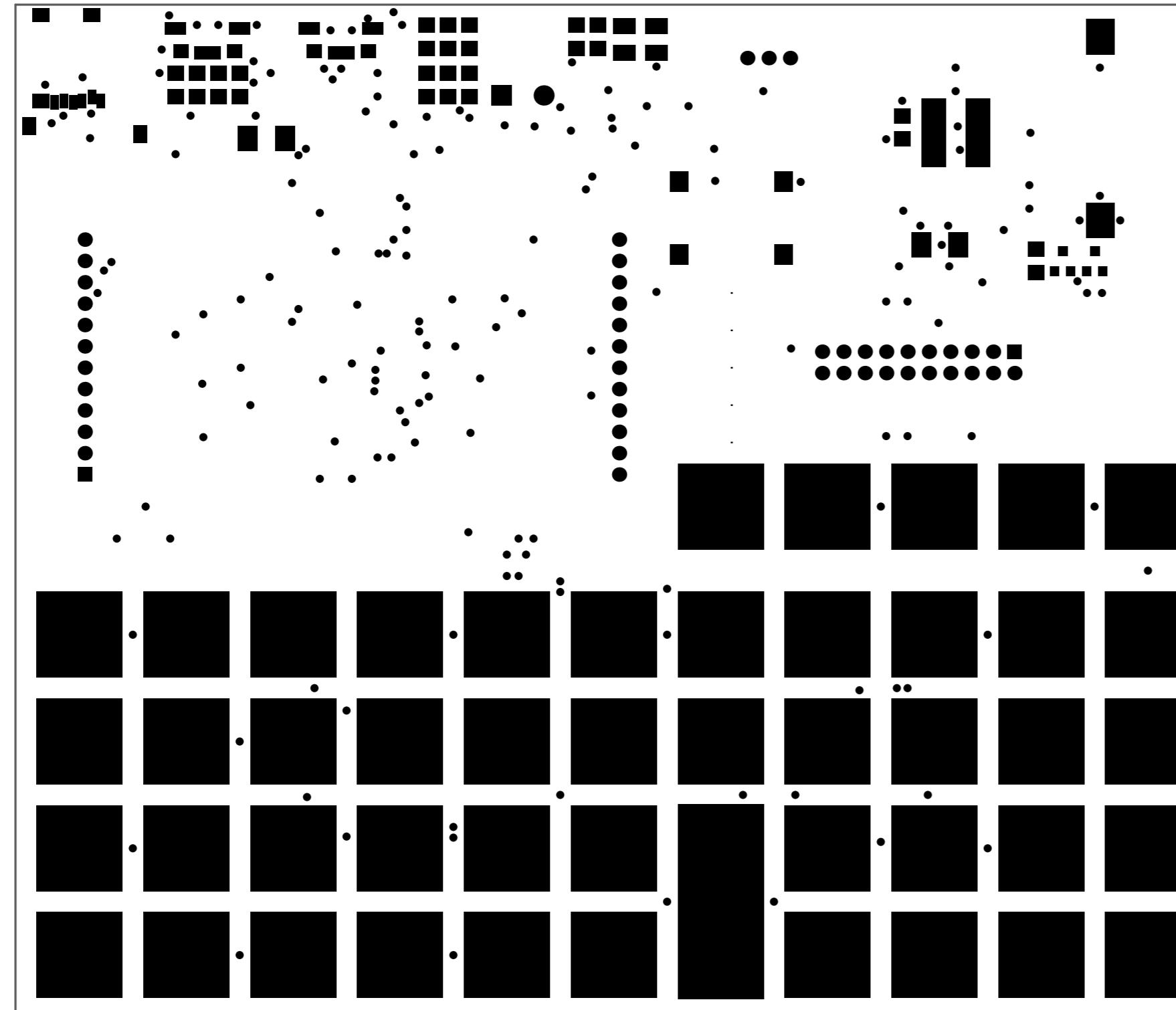
TOLERANCE UNLESS NOTED SCALE REV



TITLE: SHEET: OF:
MODEL: HC 15C DRAWING NO:
FILENAME: PCB-HC15C_REV1.PcbDoc FILETYPE: ALTIUM SHEET:
B SIZE

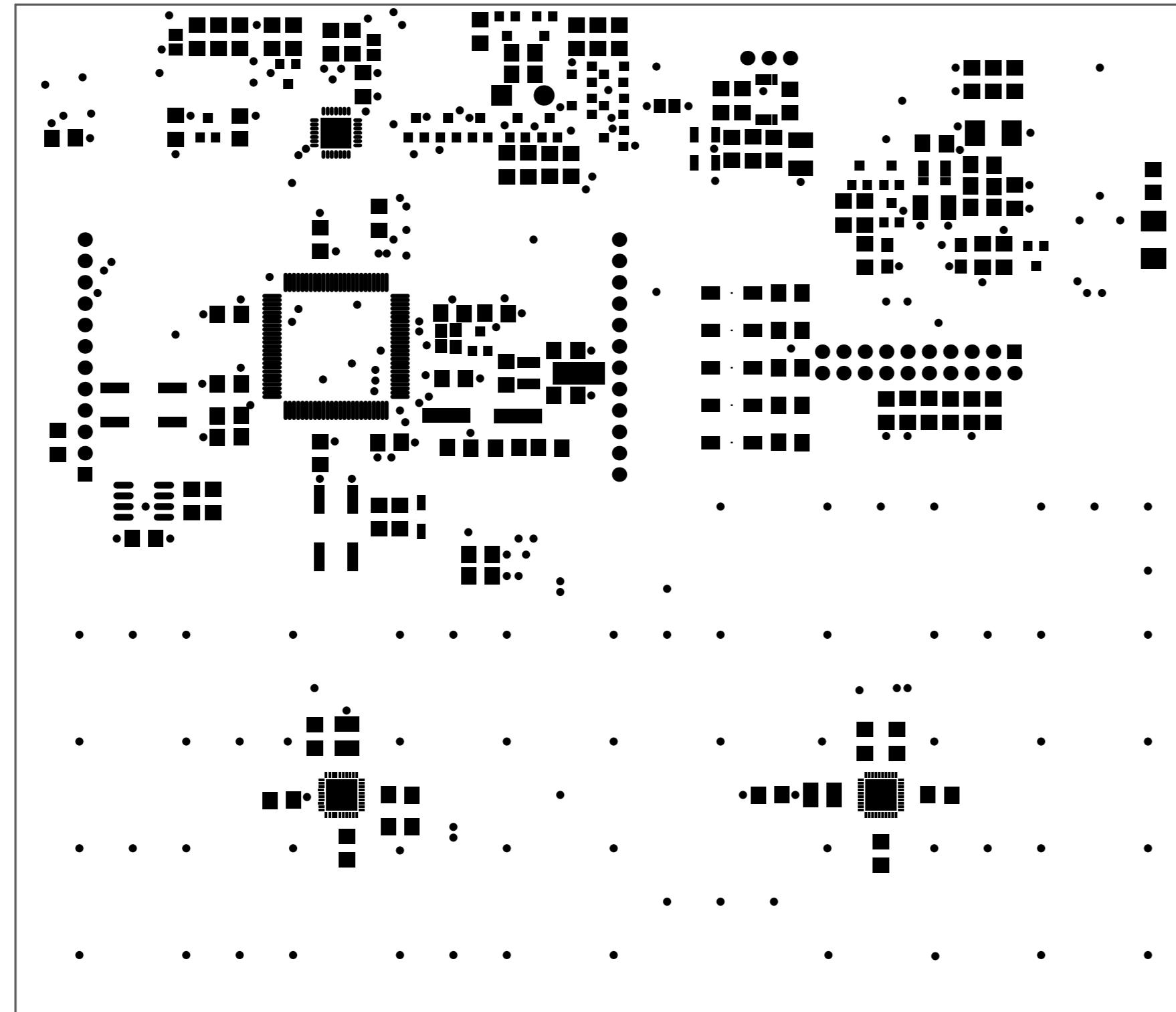
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| REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR |
| 1 | NA | NA | | | | | | | | | | | | | |

INFORMATION HEREIN CONTAINED IS THE PROPERTY OF
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COMPLETE CONFIDENCE.
REPRODUCE WITH WRITTEN CONSENT ONLY.



TOP SOLDER MASK

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|--------------|------|-----|-----|-----|-----|-----|-----|--------------|---|--|-----|-----|--|------------------|------------------|---|
| | | | | | | | | | | | | SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS. NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED PCB TO BE MARKE 94V-0 BY PCB VENDOR | | | | 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | | 1:1 | 1 |
| | | | | | | | | | | | | MATERIAL DESCRIPTION AND FINISH | | | | TOLERANCE UNLESS NOTED | SCALE | REV | |
| | | | | | | | | | | | | TITLE: MODEL: HC 15C | | | | SHEET: OF: | | | |
| | | | | | | | | | | | | DRAWING NO: PCB-HC15C | | | | FILETYPE: ALTIUM | FILETYPE: ALTIUM | FILETYPE: ALTIUM | |
| 1 | NA | NA | 06/15/11 | HSC | HSC | HSC | | | | | | HabWorks Designed Electronic Solutions | INFORMATION HEREIN CONTAINED IS THE PROPERTY OF SYNERGY LIGHTING CONTROLS AND IS TO BE HELD IN COMPLETE CONFIDENCE. REPRODUCED WITH WRITTEN CONSENT ONLY. | | | | FILETYPE: B SIZE | | |
| REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | FILENAME: PCB-HC15C_REV1.PcbDoc | FILETYPE: ALTIUM | FILETYPE: ALTIUM | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | | | |



BOTTOM SOLDER MASK

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|--------------|------|-----|-----|-----|-----|-----|-----|--------------|---|-----|-----|-----|--|--------------|
| | | | | | | | | | | | | SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS. NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED PCB TO BE MARKE 94V-0 BY PCB VENDOR | | | | 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | 1:1 |
| | | | | | | | | | | | | MATERIAL DESCRIPTION AND FINISH | | | | TOLERANCE UNLESS NOTED | SCALE |
| | | | | | | | | | | | | | | | | REV | |
| | | | | | | | | | | | | TITLE: MODEL: HC 15C | | | | SHEET: OF: DRAWING NO: PCB-HC15C | |
| 1 | NA | NA | 06/15/11 | HSC | HSC | HSC | | | | | | HabWorks Designed Electronic Solutions | | | | FILETYPE: ALTIUM | FILE: B SIZE |
| REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | FILENAME: PCB-HC15C_REV1.PcbDoc | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | |

INFORMATION HEREIN CONTAINED IS THE PROPERTY OF
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COMPLETE CONFIDENCE.
REPRODUCED WITH WRITTEN CONSENT ONLY.

| Symbol | Hit Count | Tool Size | Plated | Hole Type |
|--------|-----------|--------------------|--------|-----------|
| □ | 241 | 15mil <0.381mm> | PTH | Round |
| ○ | 27 | 30mil <0.762mm> | PTH | Round |
| ▽ | 20 | 35mil <0.889mm> | PTH | Round |
| ✖ | 2 | 66.929mil <1.7mm> | PTH | Round |
| ☒ | 5 | 106.299mil <2.7mm> | NPTH | Round |
| | 295 Total | | | |

PCB FABRICATION NOTES:

MATERIAL:

FR4 (GF per MIL-P-13949) MIN UL 94V0

Cu WEIGHT:

OUTER LAYER: 1oz
INNER LAYER: STANDARD

SOLDER MASK:

TYPE: LPI (LQUID PHOTO-IMAGE)
COVER: SMOBC (SOLDER MASK OVER BARE Cu)
COLOR: GREEN

OVERALL PCB THICKNESS:

PCB: 62MIL
TOLERANCE: 7MIL

PCB ELECTRICAL TEST

TESTED TO GERBER DATA
PURCHASE ORDER TO OVERRIDE

HOLE DIAMETER TOLERANCE:

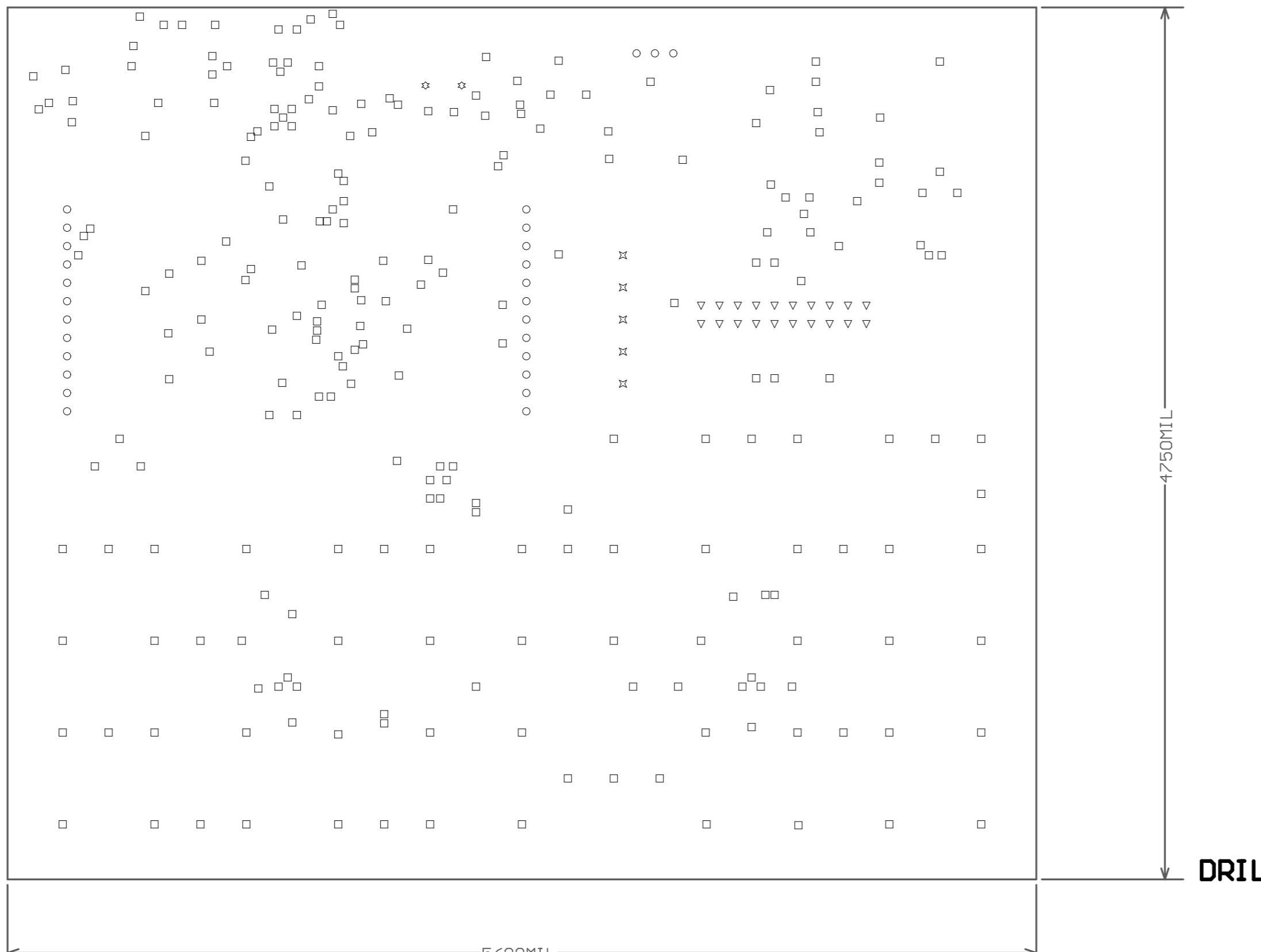
PLATED HOLE TOLERANCE: 3MIL
NON PLATED HOLE TOLERANCE: 3MIL

SILK SCREEN

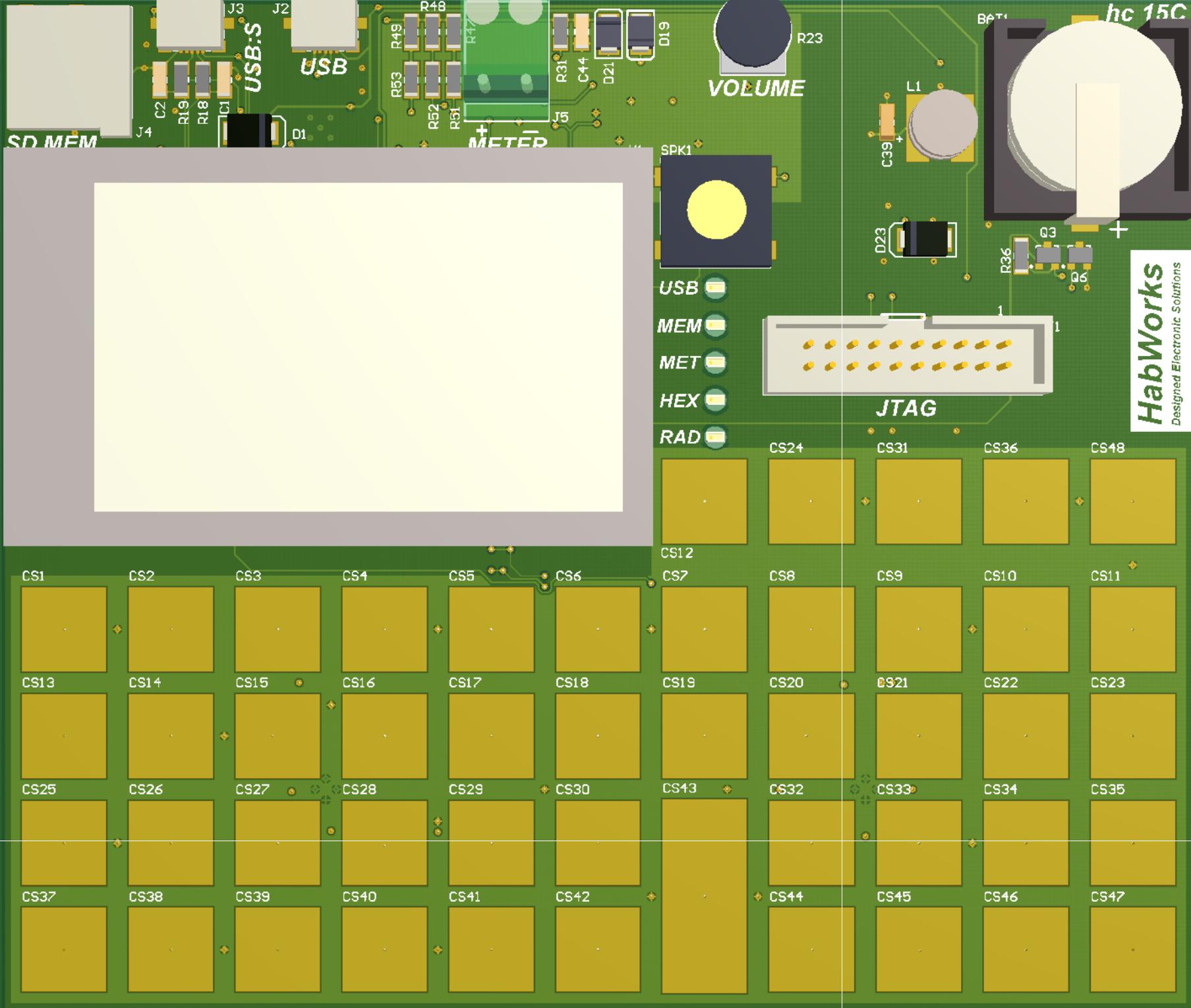
SIDES: TOP AND BOTTOM
COLOR: WHITE

ACCEPTABILITY:

STANDARD: IPC-A-600 (LATEST REV)
MFG TO ADD: DATE CODE, UL FLAME CODE



| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|--------------|------|-----|-----|-----|-----|-----|------------------|------|--|-----|-----|-----|--|--------------------------------|------------------|
| | | | | | | | | | | | | SEE CDSEA00020 FOR MANUFACTURERS & DETAILED MATERIAL SPECS. NEMA RATED FR4, .06S", 1OZ CU X LAYERS, UL & CSA RECOGNIZED PCB TO BE MARKE 94V-0 BY PCB VENDOR | | | | 2 PLACE DECIMAL +/-0.01 3 PLACE DECIMAL +/-0.005 ANGLES +/-2 DEG | 1:1 | 1 |
| | | | | | | | | | | | | MATERIAL DESCRIPTION AND FINISH | | | | TOLERANCE UNLESS NOTED | SCALE | REV |
| | | | | | | | | | | | | HabWorks Designed Electronic Solutions | | | | | | |
| | | | | | | | | | | | | INFORMATION HEREIN CONTAINED IS THE PROPERTY OF SYNERGY LIGHTING CONTROLS AND IS TO BE HELD IN COMPLETE CONFIDENCE. REPRODUCED WITH WRITTEN CONSENT ONLY. | | | | | | |
| 1 | NA | NA | 06/15/11 | HSC | HSC | HSC | | | | | | DATE | DWR | CHK | APR | REV | ECO | ECO DESCRIPTION: |
| REV | ECO | ECO | DESCRIPTION: | DATE | DWR | CHK | APR | REV | ECO | ECO DESCRIPTION: | DATE | DWR | CHK | APR | | | FILENAME:PCB-HC15C_REV1.PcbDoc | FILETYPE: ALTIUM |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | Sheet: B SIZE | | |



| Comment | Quantity | Description | Designator | MFG | MFG_PN | Supplier 1 | Supplier Part Number 1 |
|----------------|----------|---|---|------------------------|---------------------|------------|------------------------|
| CAP_SENSOR | 47 | CAP SENSOR FOR PCB | CS1, CS2, CS3, CS4, CS5, CS6, CS7, CS8, CS9, CS10, CS11, CS12, CS13, CS14, CS15, CS16, CS17, CS18, CS19, CS20, CS21, CS22, CS23, CS24, CS25, CS26, CS27, CS28, CS29, CS30, CS31, CS32, CS33, CS34, CS35, CS36, CS37, CS38, CS39, CS40, CS41, CS42, CS43, CS44, CS45, CS46, CS47, CS48 | | | | |
| CAP_SENSOR_ENT | 1 | CAP SENSOR FOR PCB | CS43 | | | | |
| CDELA00023_1 | 1 | LCD, 4X20 WITH ICONS, SERIAL INTERFACE, 5X8DOT, WHITE BACKLIGHT | | ELECTRONIC ASSEMBLY | EA DIP204J-6NLW | | |
| CDEDAA00020 | 3 | DIODE, 150MA, 100V, SOD123 | D10, D13, D14 | DIODES INC | 1N4148W-7-F | Digi-Key | 1N4148W-FDICT-ND |
| CDENAA00030 | 5 | MOSFET N CHN, VDS=60V, 115 mA, SOT 23 | Q6, Q7, Q8, Q9, Q15 | DIODES INC | 2N7002-7-F | Digi-Key | 2N7002-FDICT-ND |
| CDTDA_2 | 1 | CONN, MICRO SD, SM, ROHS | J4 | 3M | 2908-05WB-MG | Digi-Key | 3M5607CT-ND |
| CDTTB001 | 1 | CONN, HDR, 2PIN, 5MM PHONIX CONTACT, ROHS | J5 | PHOENIX CONTACT | 1933189 | Digi-Key | 277-1645-ND |
| CDEUA00049 | 1 | IC, SHUNT VOLTAGE REFERENCE | U3 | TEXAS INSTRUMENTS | LM4040C30IDBZR | Digi-Key | 296-20887-1-ND |
| CDEKA00015 | 1 | CRYSTAL, 32.768KHZ, 12.5PF, SMT SM CYLINDRICAL CAN | X1 | CITIZEN | CMR200T32.768KDZF-L | Digi-Key | 300-8340-1-ND |
| CDEKA00019 | 1 | CRYSTAL, 12.000MHZ, 18PF, SMT HC49/US | X2 | CITIZEN | HCM49-12.000MABJ-UT | Digi-Key | 300-8548-1-ND |
| CDECA00095 | 4 | CAP, CERAMIC, NPO, 18PF, 50V, 1206, 5%, RoHS | C1, C2, C6, C7 | YAGEO | CC1206JRNP09BN180 | Digi-Key | 311-1152-1-ND |
| CDEUA00070_1 | 1 | IC, TXRX USB TO UART BRIDGE, ROHS, 28QFN | U2 | SILICON LABS | CP2101-GM | Digi-Key | 336-1162-ND |
| CDECA00143_1 | 1 | CAP, CERAMIC, X7R, 150NF, 50V, 1206, 10%, RoHS | C37 | KEMET | C0805C154K5RACTU | Digi-Key | 399-3489-1-ND |
| CDECA00139_2 | 1 | CAP, TANT, 220UF, 6.3V, 20%, LOW ESR, 3528, ROHS | C10 | KEMET | T520B227M006ATE070 | Digi-Key | 399-5756-1-ND |
| CDEUA00013_1 | 1 | IC, PHOTOCOUPLER, NPN OUTPUT - NO BASE, SM, ROHS | U10 | SHARP MICROELECTRONICS | PS817X2NIP0F | Digi-Key | 425-2192-1-ND |
| CDELA00019_1 | 5 | DIODE,LED RED UNDER MOUNT SM VF=1.8 I=2MA ROHS | D2, D3, D4, D5, D6 | OSRAM | LS M47K-J2L1-1-Z | Digi-Key | 475-2762-1-ND |
| CDECA00070 | 28 | CAP, CERAMIC CHIP 0.1UF 10% 50V X7R ROHS | C3, C8, C9, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C29, C30, C31, C32, C33, C34, C35, C36, C38, C42, C44 | AVX | 12065C104KAT2A | Digi-Key | 478-1556-1-ND |
| CDECA00139_1 | 1 | CAP, TANT, 22UF, 6.3V, 20%, LOW ESR, 1206ROHS | C39 | AVX | TAJA226K006RNJ | Digi-Key | 478-3865-1-ND |
| CDECA00110_1 | 1 | CAP, TANT, 47UF, 25V, 20%, 3528 ROHS | C43 | AVX | TAJB476M010RNJ | Digi-Key | 478-3891-1-ND |
| CDECA00143 | 4 | CAP, CERAMIC, NPO, 10PF, 50V, 1206, 5%, RoHS | C4, C5, C25, C26 | AVX | 12065A100DAT2A | Digi-Key | 478-5053-1-ND |
| | | | FB1, FB2, FB3, | | | | |

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|--------------|----|--|---|-------------------------|-----------------------|----------|----------------------|
| CDECA00110_1 | 1 | CAP, TANT, 47UF, 25V, 20%, 3528 ROHS | C43 | AVX | TAJB476M010RNJ | Digi-Key | 478-3891-1-ND |
| CDECA00143 | 4 | CAP, CERAMIC, NPO, 10PF, 50V, 1206, 5%, RoHS | C4, C5, C25, C26 | AVX | 12065A100DAT2A | Digi-Key | 478-5053-1-ND |
| CDEVA00115 | 5 | FERRITE, 1KOHM AT 100MHZ, 220MA, .450DCR | FB1, FB2, FB3, FB4, FB5 | MURATA | BLM21AG102SN1D | Digi-Key | 490-1041-1-ND |
| CDECA00122 | 2 | CAP, CERAMIC CHIP 1UF 10%50V X7R ROHS | C27, C28 | AVX | GRM32RR71H105K | Digi-Key | 490-1863-1-ND |
| CDEUA00052_1 | 2 | IC, TOUCHKEY CONTROLLER, 24CH, I2C, 40QFN | U7, U8 | ST | STMPE24M31 | Digi-Key | 497-10380-1-ND |
| CDEUA00069_2 | 1 | IC, MICRO CONTROLLER, 512KB FLASH, 64K, ARM CORTEX M3, 100LQFP | 100LQFP | NXP | LPC1769FBD100 | Digi-Key | 568-4966-ND |
| CDEVA_2 | 1 | SPEAKER 8OHM .7W 88DB 13MM SMD | SPK1 | PUI AUDIO | SMS-1308MS-R | Digi-Key | 668-1206-1-ND |
| CDEVA00082_1 | 1 | CONN, BAT HOLDER 2-COIN CELL 20MM, SMD, ROHS | BAT1 | KEYSTONE ELECTRONICS | \$1062 | Digi-Key | 1062K-ND |
| CDERA00207_2 | 1 | RESISTOR, POT 10K OHM 20% THUMBWHELL, CERM, TH, ROHS | R23 | BOURNS | 3352T-1-103LF | Digi-Key | 3352T-103LF-ND |
| CDTDA00013 | 1 | CONN, HDR, 2X10, 100MIL, TH, ROHS | J1 | TYCO ELECTRONICS | 5103309-5 | Digi-Key | A33166-ND |
| CDTDA_1 | 2 | CONN, RCPTL MICRO USB TYPE AB, SM RA | J2, J3 | TYCO | 1981584-1 | Digi-Key | A97799CT-ND |
| CDEUA00020 | 1 | IC, EEPROM, I2C, 256x8, 8PIN SO8, ROHOS | U6 | ATMEL | AT24C02N-10SU-2.7 | Digi-Key | AT24C02N-10SU-2.7-ND |
| CDEDA00043 | 1 | DIODE, ZENER, 5.1V, 225MW, SOT-23, ROHS | D7 | ON SEMICONDUCTOR | BZX84C5V1LT1G | Digi-Key | BZX84C5V1LT1GOSCT-N |
| CDEDA00055_1 | 1 | DIODE, ZENER, 18V, 225MW, SOT-23, ROHS | D15 | ON SEMICONDUCTOR | BZX84C18LT1G | Digi-Key | BZX84C18LT1GOSCT-ND |
| CDEDA00055_2 | 2 | DIODE, ZENER, 33V, 225MW, SOT-23, ROHS | D20, D22 | ON SEMICONDUCTOR | BZX84C33LT1G | Digi-Key | BZX84C33LT1GOSCT-ND |
| CDEDA00037_1 | 4 | VARISTOR, TVS, 5.5VDC, 1206, 150A, .60J, RoHS | D8, D9, D11, D12 | LITTLEFUSE | V5.5MLA1206NH | Digi-Key | F2219TR-ND |
| CDENA00031_2 | 4 | MOSFET N CHN, VDS=60V, 115 mA, SOT 23 | Q11, Q12, Q13, Q16 | INTERNATIONAL RECTIFIER | IRLML2803TRPBF | Digi-Key | IRLML2803PBFCT-ND |
| CDENA00031 | 3 | MOSFET P CHN, VDS=30V, RDSON = .60OHM, SOT 23 | Q1, Q3, Q10 | INTERNATIONAL RECTIFIER | IRLML5103 | Digi-Key | IRLML5103PBFCT-ND |
| CDENA00031_3 | 3 | MOSFET P CHN, VDS=12V, RDSON = .050OHM, SOT 23 | Q4, Q5, Q14 | INTERNATIONAL RECTIFIER | IRLML6401TRPBF | Digi-Key | IRLML6401PBFCT-ND |
| CDEUA00071_1 | 1 | IC AUDIO AMP, CLASS AB, 325mW, 8SOIC, ROHS | U5 | NATIONAL SEMICONDUCTOR | LM386M-1/ NOPB | Digi-Key | LM386M-1-ND |
| CDEUA00014_1 | 1 | IC, BUCK REGULATOR, 0.6A, TSOT23-6 | U9 | NATIONAL SEMICONDUCTOR | LM2842XMK-ADJL / NOPB | Digi-Key | LM2842XMK-ADJLCT-ND |
| CDEDA00019 | 5 | Diode, Schottky rectifier, 40V, 1A, SMB package, Pb free | D1, D16, D17, D23 | ON SEMICONDUCTOR | MBRS140T3G | Digi-Key | MBRS140T3GOSCT-ND |
| CDERA00181 | 2 | RESISTOR, CHIP 1206 0.0 OHM 1% 1/4W THICK FILM ROHS | R50, R51 | PANASONIC | ERJ-8GEYJ122V | Digi-Key | P0.0ECT-ND |
| CDERA00191 | 2 | RESISTOR, CHIP 1206 1MOHM 1% 1/4W THICK FILM ROHS | R21, R22 | PANASONIC | ERJ-8GEYJ105V | Digi-Key | P1.0MECT-ND |
| CDERA00195 | 2 | RESISTOR, CHIP 1206 1K OHM 1% 1/4W THICK FILM ROHS | R46, R55 | PANASONIC | ERJ-8ENF1001V | Digi-Key | P1.00KFCT-ND |
| CDERA00179 | 1 | RESISTOR, CHIP 1206 1.5K OHM 1% 1/4W THICK FILM ROHS | R16 | PANASONIC | ERJ-8GEYJ152V | Digi-Key | P1.5KECT-ND |
| CDERA00275_9 | 1 | RESISTOR, CHIP 1206 3K OHM 1% 1/4W THICK FILM ROHS | R14 | PANASONIC | ERJ-8ENF3001V | Digi-Key | P3.00KFCT-ND |
| CDERA00273_1 | 1 | RESISTOR, CHIP 1206 3.32K OHM 1% 1/4W THICK FILM ROHS | R40 | PANASONIC | ERJ-8ENF3321V | Digi-Key | P3.32KFCT-ND |
| CDERA00169 | 1 | RESISTOR, CHIP 1206 4.7K OHM 1% 1/4W THICK FILM ROHS | R17 | PANASONIC | ERJ-8GEYJ472V | Digi-Key | P4.7KECT-ND |
| CDERA00275_3 | 1 | RESISTOR, CHIP 1206 7.5K OHM 1% 1/4W THICK FILM ROHS | R49 | PANASONIC | ERJ-8ENF7501V | Digi-Key | P7.50KFCT-ND |
| CDERA00142 | 1 | RESISTOR, CHIP 1206 10 OHM 1% 1/4W THICK FILM ROHS | R28 | PANASONIC | ERJ-8ENF10R0V | Digi-Key | P10.0FCT-ND |
| CDERA00170 | 15 | RESISTOR, CHIP 1206 10K OHM 1% 1/4W THICK FILM ROHS | R1, R2, R3, R4, R5, R6, R12, R13, R24, R25, R26, R27, R29, R30, R35 | PANASONIC | ERJ-8GEYJ103V | Digi-Key | P10KECT-ND |
| CDERA00275_2 | 1 | RESISTOR, CHIP 1206 11K OHM 1% 1/4W THICK FILM ROHS | R41 | PANASONIC | ERJ-8ENF1102V | Digi-Key | P11.0KFCT-ND |
| CDERA00275_5 | 1 | RESISTOR, CHIP 1206 12K OHM 1% 1/4W THICK FILM ROHS | R48 | PANASONIC | ERJ-8ENF1202V | Digi-Key | P12.0KECT-ND |

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| CDERA00170 | 15 | RESISTOR, CHIP 1206 10K OHM 1% 1/4W THICK FILM ROHS | R35 | PANASONIC | ERJ-8GEYJ103V | Digi-Key | P10KECT-ND |
| CDERA00275_2 | 1 | RESISTOR, CHIP 1206 11K OHM 1% 1/4W THICK FILM ROHS | R41 | PANASONIC | ERJ-8ENF1102V | Digi-Key | P11.0KFCT-ND |
| CDERA00275_5 | 1 | RESISTOR, CHIP 1206 12K OHM 1% 1/4W THICK FILM ROHS | R48 | PANASONIC | ERJ-8ENF1202V | Digi-Key | P12.0KFCT-ND |
| CDERA00275_4 | 1 | RESISTOR, CHIP 1206 30K OHM 1% 1/4W THICK FILM ROHS | R47 | PANASONIC | ERJ-8ENF3002V | Digi-Key | P30.0KFCT-ND |
| CDERA00207 | 2 | RESISTOR, CHIP 1206 33 OHM 1% 1/4W THICK FILM ROHS | R18, R19 | PANASONIC | ERJ-8ENF33R0V | Digi-Key | P33.0FCT-ND |
| CDENA00031_1 | 1 | MOSFET P CHN, VDS=50V, RDSON = 10OHM, SOT 23 | Q2 | DIODES INC | BSS84-7-F | Digi-Key | P59.0KFCT-ND |
| CDERA00275_7 | 1 | RESISTOR, CHIP 1206 59K OHM 1% 1/4W THICK FILM ROHS | R42 | PANASONIC | ERJ-8ENF5902V | Digi-Key | P59.0KFCT-ND |
| CDERA00176 | 1 | RESISTOR, CHIP 1206 100 OHM 1% 1/4W THICK FILM ROHS | R31 | PANASONIC | ERJ-8GEYJ101V | Digi-Key | P100ECT-ND |
| CDERA00198 | 8 | RESISTOR, CHIP 1206 100K OHM 1% 1/4W THICK FILM ROHS | R15, R20, R33, R37, R39, R43, R54, R56 | PANASONIC | ERJ-8ENF1003V | Digi-Key | P100KFCT-ND |
| CDERA00192 | 6 | RESISTOR, CHIP 1206 180 OHM 1% 1/4W THICK FILM ROHS | R7, R8, R9, R10, R11, R45 | PANASONIC | ERJ-8ENF1800V | Digi-Key | P180FCT-ND |
| CDERA00273_2 | 1 | RESISTOR, CHIP 1206 220 OHM 1% 1/4W THICK FILM ROHS | R38 | PANASONIC | ERJ-8ENF2200V | Digi-Key | P220FCT-ND |
| CDERA00209 | 1 | RESISTOR, CHIP 1206 270 OHM 1% 1/4W THICK FILM ROHS | R53 | PANASONIC | ERJ-8ENF2700V | Digi-Key | P270FCT-ND |
| CDERA00275_8 | 3 | RESISTOR, CHIP 1206 300K OHM 1% 1/4W THICK FILM ROHS | R34, R36, R44 | PANASONIC | ERJ-8ENF3003V | Digi-Key | P300KFCT-ND |
| CDERA00154 | 2 | RESISTOR, CHIP 1206 330 OHM 1% 1/4W THICK FILM ROHS | R32, R57 | PANASONIC | ERJ-8ENF3300V | Digi-Key | P330FTR-ND |
| CDERA00275_6 | 1 | RESISTOR, CHIP 1206 357 OHM 1% 1/4W THICK FILM ROHS | R52 | PANASONIC | ERJ-8ENF3570V | Digi-Key | P357FCT-ND |
| CDESA00095 | 2 | SWITCH, MOM, NO, SM | SW1, SW2 | PANASONIC | EVQ-QXS02W | Digi-Key | P13612SCT-ND |
| CDECA00085 | 4 | CAP, CERAMIC CHIP 0.01UF 10% 50V X7R ROHS | C40, C41, C45, C46 | PANASONIC | ECJ-1VB1H103K | Digi-Key | PCC1784CT-ND |
| CDEDAA00055_3 | 2 | DIODE, 1A, 100V, SMA, ROHS | D19, D21 | FAIRCHILD SEMICONDUCTOR | TSOT | Digi-Key | S1BFSCT-ND |
| CDEHA00005_1 | 1 | INDUCTOR, 33UH, 10%, SMT, NON-SHIELDED, FERRITE CORE, ROHS | ROHS | BOURNS | SDR0805-330KL | Digi-Key | SDR0805-330KLCT-ND |