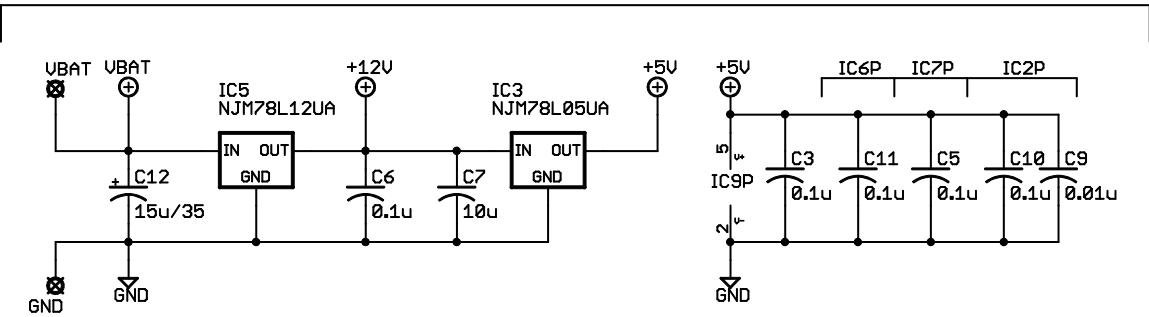
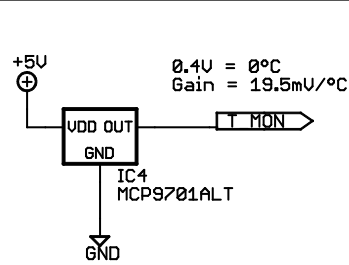


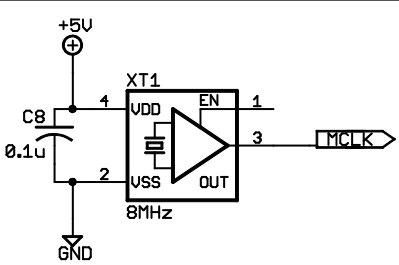
Power Supplies and Decoupling



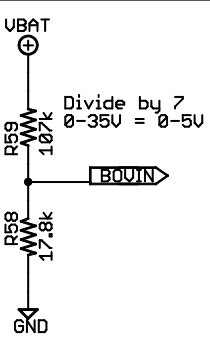
Temperature Monitor



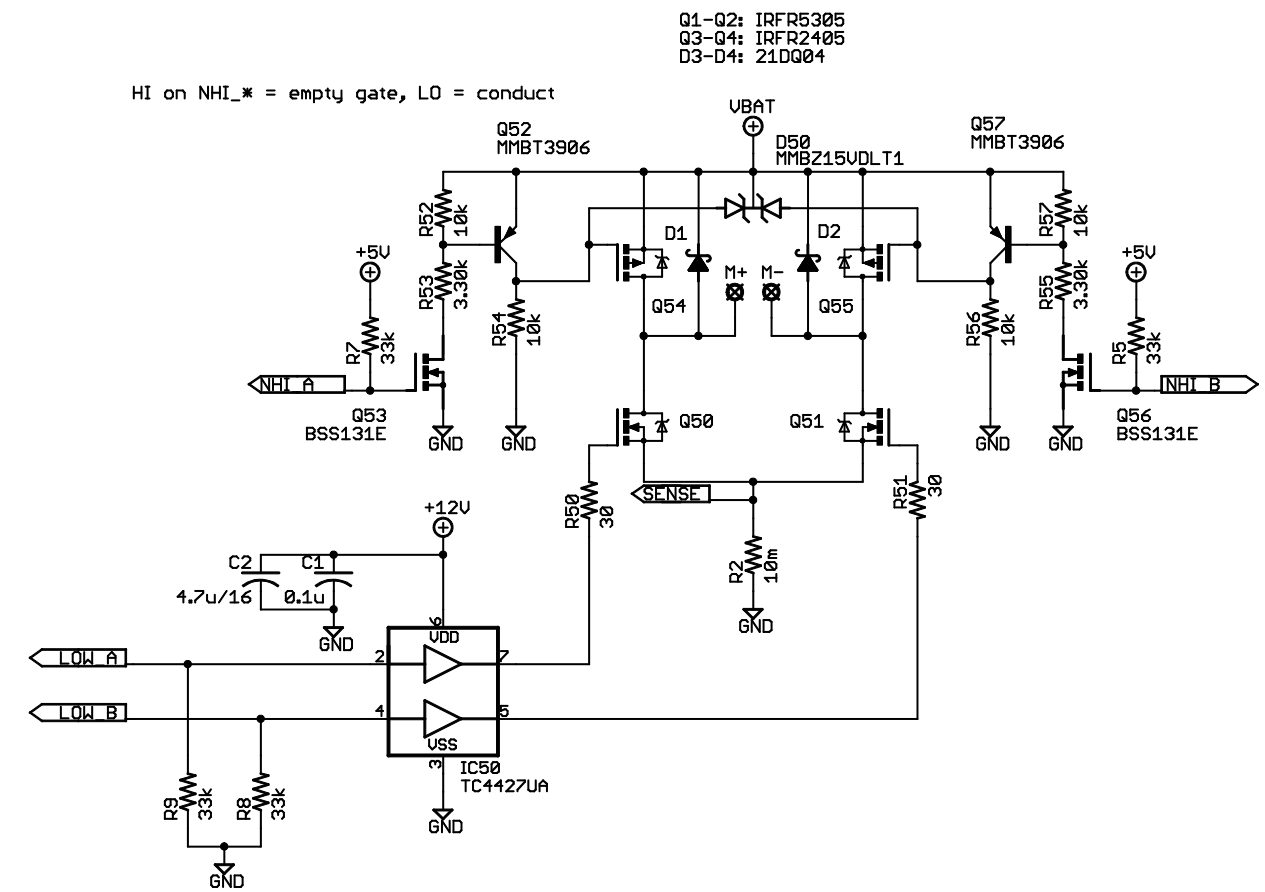
Main Clock



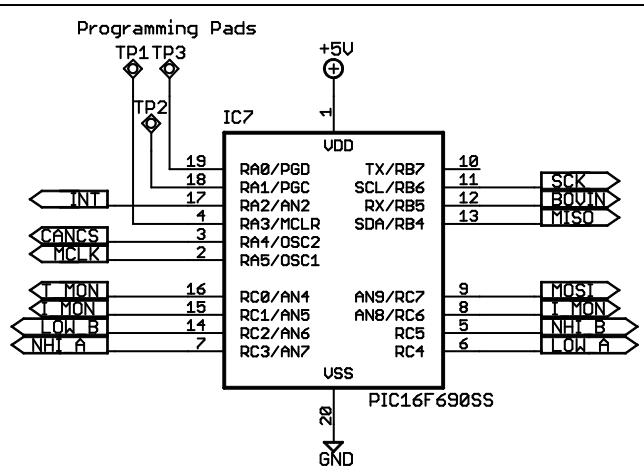
Brown-out Monitor



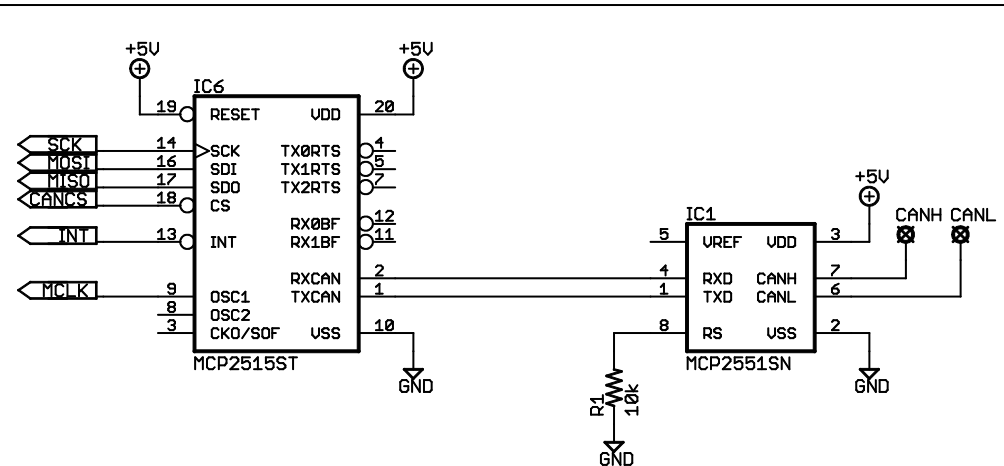
Complementary MOSFET H-Bridge



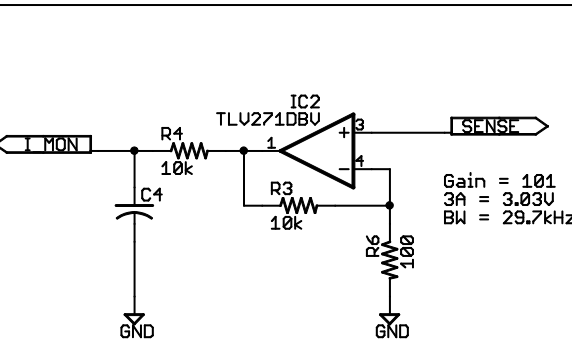
Microcontroller



CAN Interface



Low-Side Current Monitor



CAN-enabled motor drive for SBT150  
Club SONIA AUU, ETS  
(C) Tennessee Carmel-Veilleux 2007

TITLE: SBT150\_CAN

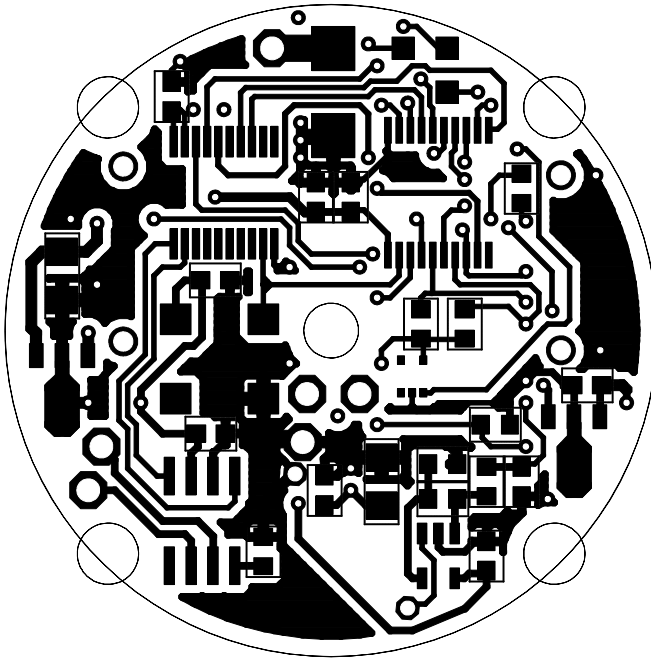
Document Number:

REV:  
B

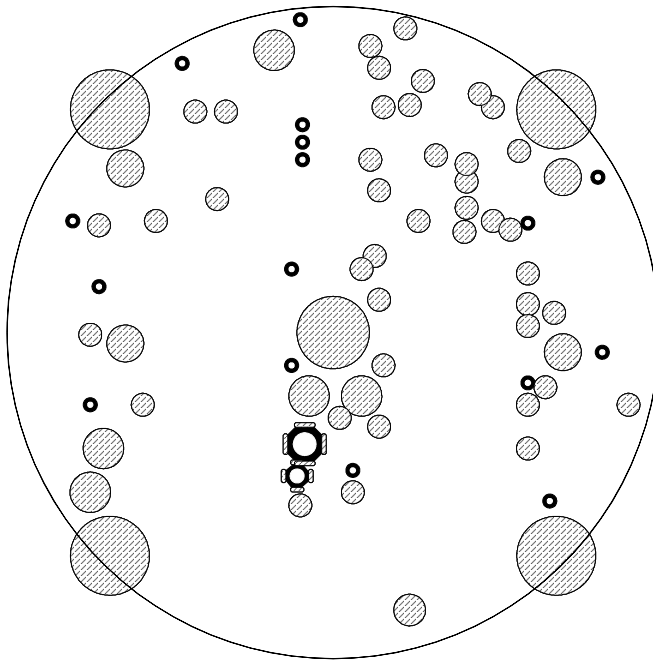
Date: 2007-12-12 11:31:15

Sheet: 1/1

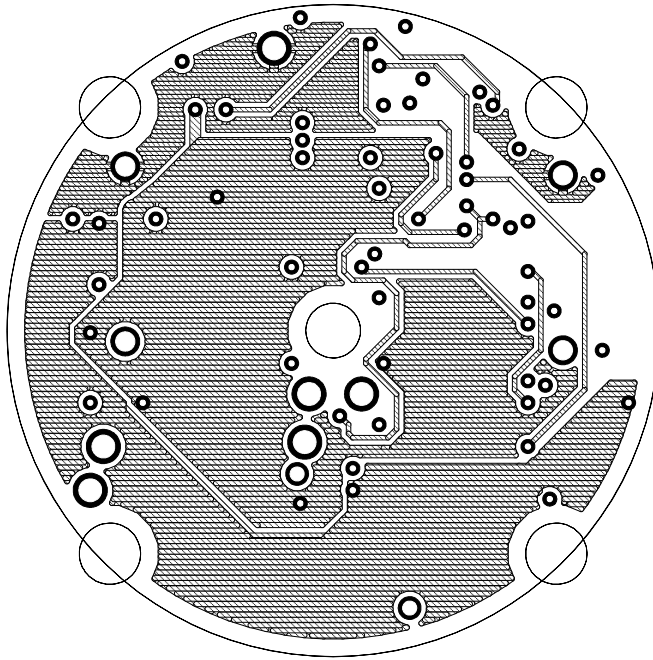
Design: SBT150\_CAN REV B  
Designer: Tennessee Carmel-Veilleux (Club SONIA)  
Contact: 514-396-8800x7622 / tennessee.carmelveilleux@gmail.com  
Layer: Top Copper (\*.top)



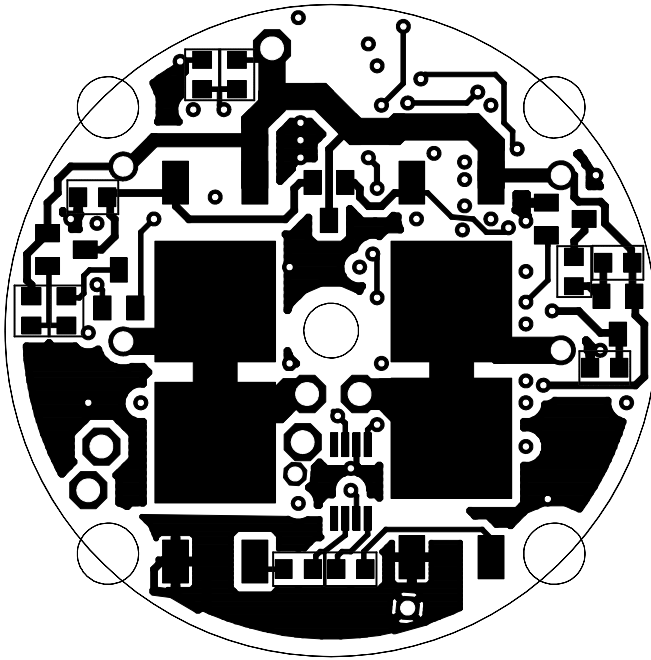
Design: SBT150\_CAN REV B  
Designer: Tennessee Carmel-Veilleux (Club SONIA)  
Contact: 514-396-8800x7622 / tennessee.carmelveilleux@gmail.com  
Layer: Inner 1 (\*.ly2)



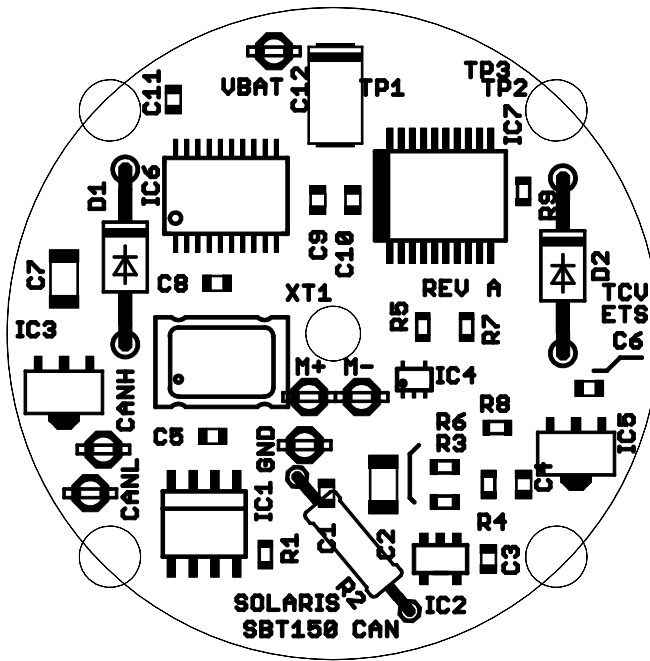
Design: SBT150\_CAN REV B  
Designer: Tennessee Carmel-Veilleux (Club SONIA)  
Contact: 514-396-8800x7622 / tennessee.carmelveilleux@gmail.com  
Layer: Inner 2 (\*.ly3)



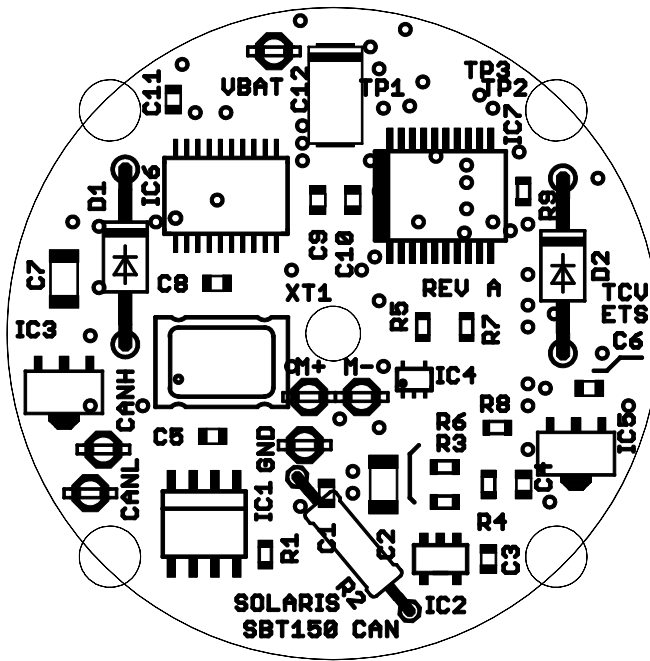
Design: SBT150\_CAN REV B  
Designer: Tennessee Carmel-Veilleux (Club SONIA)  
Contact: 514-396-8800x7622 / tennessee.carmelveilleux@gmail.com  
Layer: Bottom Copper (\*.bot)



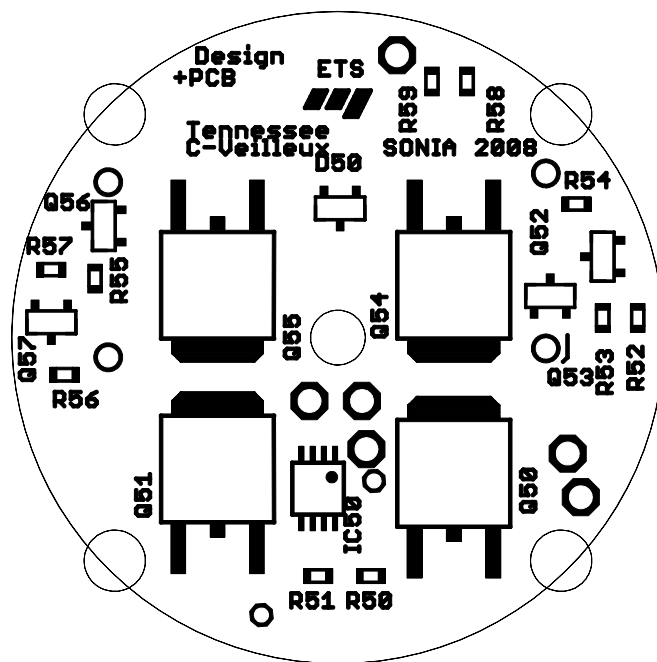
Design: SBT150\_CAN REV B  
Designer: Tennessee Carmel-Veilleux (Club SONIA)  
Contact: 514-396-8800x7622 / tennessee.carmelveilleux@gmail.com  
Layer: Silk Screen Top (\*.sst)



Design: SBT150\_CAN REV B  
Designer: Tennessee Carmel-Veilleux (Club SONIA)  
Contact: 514-396-8800x7622 / tennessee.carmelveilleux@gmail.com  
Layer: Silk Screen Top (\*.sst)

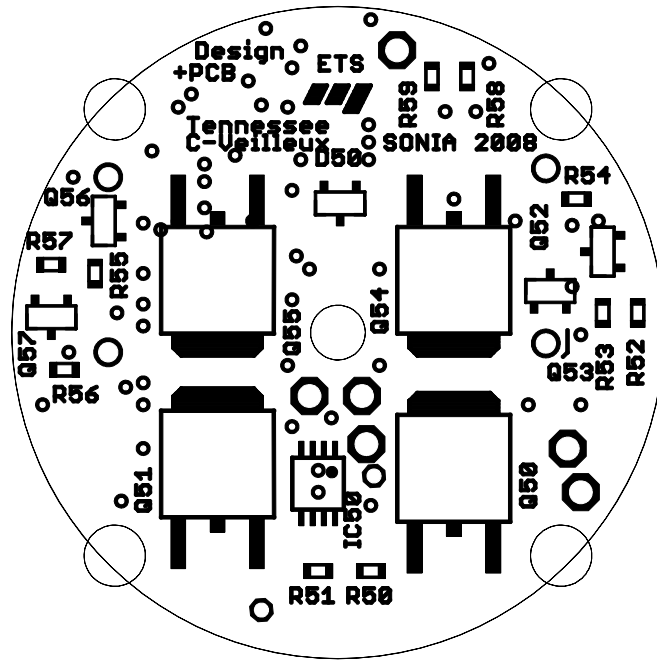


Layer: Silk Screen Bottom (\*.asp)  
 Contact: 514-396-8800x7622 \ tennessee.carmelveillex@gmail.com  
 Designer: Tennessee Carmel-Veillex (Club SONIA)  
 Design: SBT150\_CAN REV B

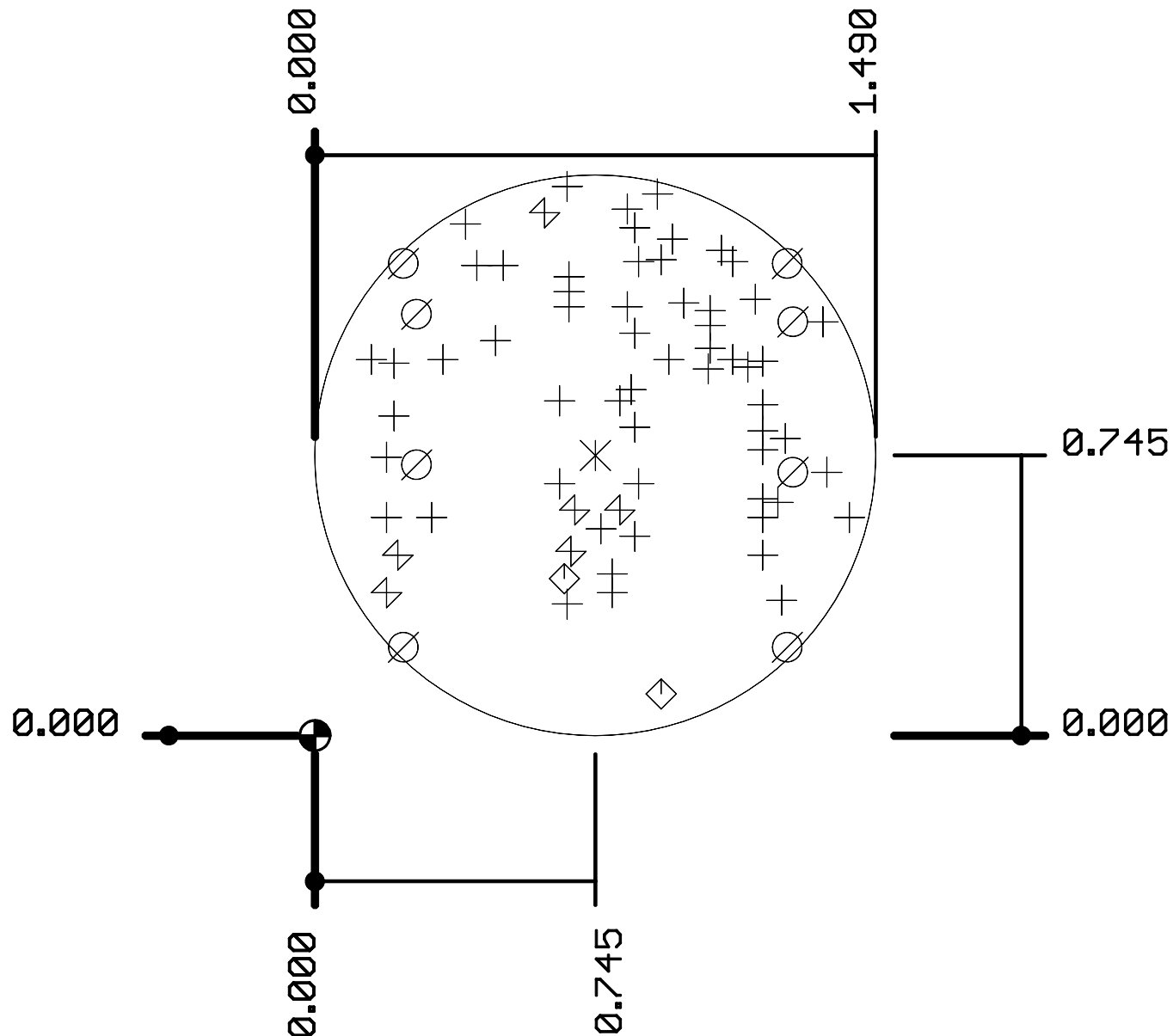




Layer: Silk Screen Bottom (\*.asb)  
 Contact: 514-396-8800x522 \ tennessee.carmelveillex@gmail.com  
 Designer: Tennessee Carmel-Veillex (Club SONIA)  
 Design: SBT150\_CAN REV B



Design: SBT150\_CAN REV B  
 Designer: Tennessee Carmel-Veilleux (Club SONIA)  
 Contact: 514-396-8800x7622 / tennessee.carmelveilleux@gmail.com  
 Layer: Board Milling Outline Dimensions (\*.drc)



## Drill Legend

| Sym | N° | Qty | Mils | Plated |
|-----|----|-----|------|--------|
| +   | 1  | 58  | 12   | YES    |
| X   | 2  | 2   | 32   | YES    |
| □   | 3  | 4   | 44   | YES    |
| ◇   | 4  | 6   | 52   | YES    |
| ⊗   | 5  | 1   | 125  | NOT    |
| ⊠   | 6  | 4   | 140  | NOT    |

**Bill of Material from SBT150\_CAN.sch, 61 parts, grouped by values, as of 2007-12-12 11:37:08**

| <b>Qty</b> | <b>Numéro du distributeur</b> | <b>Part</b>                    | <b>Distributeur</b>   |
|------------|-------------------------------|--------------------------------|-----------------------|
| 7          | 490-1519-1-ND                 | C1, C3, C5, C6, C8, C10, C11   | Digikey               |
| 1          | 587-1331-1-ND                 | C2                             | Digikey               |
| 1          |                               | C4                             |                       |
| 1          | PCC13491CT-ND                 | C7                             | Digikey               |
| 1          | PCC1763CT-ND                  | C9                             | Digikey               |
| 1          | 478-1708-1-ND                 | C12                            | Digikey               |
| 6          |                               | CANH, CANL, GND, M+, M-, VBAT  |                       |
| 2          | 1N5819-TPCT-ND                | D1, D2                         | Digikey               |
| 1          | MMBZ15VDLT1GOSCT-ND           | D50                            | Digikey               |
| 1          | MCP2551-I/SN-ND               | IC1                            | Digikey               |
| 1          | 296-13371-1-ND                | IC2                            | Digikey               |
| 1          | NJM#78L05UA-ND                | IC3                            | Digikey               |
| 1          | MCP9701AT-E/LTCT-ND           | IC4                            | Digikey               |
| 1          | NJM#78L12UA-ND                | IC5                            | Digikey               |
| 1          | MCP2515-I/ST                  | IC6                            | Direct from Microchip |
| 1          | PIC16F690-I/SS-ND             | IC7                            | Digikey               |
| 1          | TC4427AEUA                    | IC50                           | Direct from Microchip |
| 1          |                               | KK1                            |                       |
| 2          | IRFR2405PBFCT-ND              | Q50, Q51                       | Digikey               |
| 2          | MMBT3906-TPCT-ND              | Q52, Q57                       | Digikey               |
| 2          | BSS131XTINCT-ND               | Q53, Q56                       | Digikey               |
| 2          | IRFR5305-ND                   | Q54, Q55                       | Digikey               |
| 7          | RHM10.0KHCT-ND                | R1, R3, R4, R52, R54, R56, R57 | Digikey               |
| 1          | WLBR010FECT-ND                | R2                             | Digikey               |
| 4          | RHM33.0KHCT-ND                | R5, R7, R8, R9                 | Digikey               |
| 1          | RHM100HCT-ND                  | R6                             | Digikey               |
| 2          | RHM30GCT-ND                   | R50, R51                       | Digikey               |
| 2          | RHM3.30KHCT-ND                | R53, R55                       | Digikey               |
| 1          | RHM17.8KHCT-ND                | R58                            | Digikey               |
| 1          | 541-107KHCT-ND                | R59                            | Digikey               |
| 3          |                               | TP1, TP2, TP3                  |                       |
| 1          | CW553CT-ND                    | XT1                            | Digikey               |