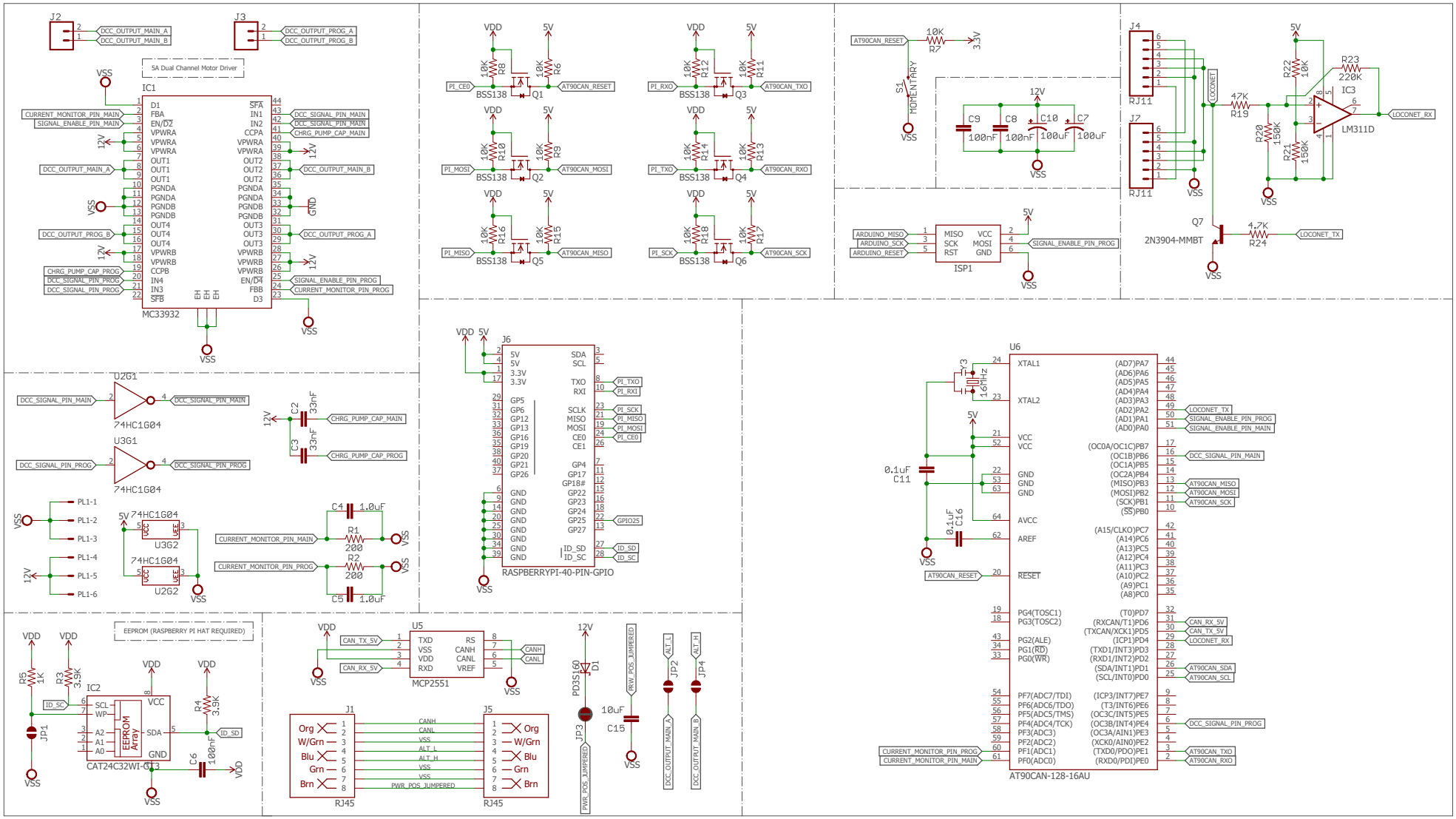
J2
J3
DCC_OUTPUT_MAIN_A
DCC_OUTPUT_MAIN_B
DCC_OUTPUT_PROG_A
DCC_OUTPUT_PROG_B
5A Dual Channel Motor Driver
IC1
MC33932
CURRENT_MONITOR_PIN_MAIN
SIGNAL_ENABLE_PIN_MAIN
DCC_SIGNAL_PIN_MAIN
CHRG_PUMP_CAP_MAIN
CHRG_PUMP_CAP_PROG
DCC_SIGNAL_PIN_PROG
SIGNAL_ENABLE_PIN_PROG
CURRENT_MONITOR_PIN_PROG
VDD
5V
12V
VSS
GND
BSS138
Q1
Q2
Q3
Q4
Q5
Q6
PI_CE0
PI_MOSI
PI_MISO
PI_RXO
PI_TXO
PI_SCK
AT90CAN_RESET
AT90CAN_MOSI
AT90CAN_MISO
AT90CAN_TXO
AT90CAN_RXO
AT90CAN_SCK
S1
MOMENTARY
3.3V
C9
C8
C10
C7
100nF
100uF
J4
J7
RJ11
LOCONET
LM311D
IC3
LOCONET_RX
LOCONET_TX
2N3904-MMBT
Q7
ISP1
ARDUINO_MISO
ARDUINO_SCK
ARDUINO_RESET
MISO
SCK
RST
VCC
MOSI
GND
U2G1
U3G1
74HC1G04
U3G2
U2G2
C2
C3
33nF
C4
C5
1.0uF
R1
R2
200
PL1-1
PL1-2
PL1-3
PL1-4
PL1-5
PL1-6
J6
RASPBERRYPI-40-PIN-GPIO
GPIO25
ID_SD
ID_SC
U6
AT90CAN-128-16AU
XTAL1
XTAL2
16MHz
C11
C16
0.1uF
RESET
AVCC
AREF
LOCONET_TX
SIGNAL_ENABLE_PIN_PROG
SIGNAL_ENABLE_PIN_MAIN
DCC_SIGNAL_PIN_MAIN
AT90CAN_MISO
AT90CAN_MOSI
AT90CAN_SCK
AT90CAN_SDA
AT90CAN_SCL
CAN_RX_5V
CAN_TX_5V
LOCONET_RX
DCC_SIGNAL_PIN_PROG
AT90CAN_TXO
AT90CAN_RXO
CURRENT_MONITOR_PIN_PROG
CURRENT_MONITOR_PIN_MAIN
EEPROM (RASPBERRY PI HAT REQUIRED)
IC2
CAT24C32WI-G
EEPROM Array
SCL
WP
A2
A1
A0
SDA
GND
VCC
R5
1K
R3
3.9K
R4
JP1
C6
100nF
U5
MCP2551
TXD
VSS
VDD
RXD
RS
CANH
CANL
VREF
CAN_TX_5V
CAN_RX_5V
J1
J5
RJ45
Org
W/Grn
Blu
Grn
Brn
ALT_L
ALT_H
PWR_POS_JUMPERED
PD3S160
D1
JP3
10uF
C15
JP2
JP4
DCC_OUTPUT_MAIN_A
DCC_OUTPUT_MAIN_B