Logic Supply Screw TerminalSmx_Dmx04mx_Dmx04mx_Dmx04mx_Dmx04mx_Dmx09mx_Tx01mx_Tx04mx_Tx04mx_Term ExtPwr0J Stage EN

Motor Supply Input

J18   J10 J14 J15 J19   J16   J17   J20   J9
J18   J10 J14 J15 J19   J16   J17   J20   J9

Q10
Q10
L1   CSD19534Q5A
L1   Q12
3u6   BSC123N10LSG
Internal Regulator
Internal Regulator

SMCJ36CA   D2
C44   Q1
D2
U6
R10   SiR496DP-T1-RE
R11   TPS2662DRCR
R76
R   R
Active Reg
24k
AZ1084-5.0 C110
U18 C11
U18 10u

10u
C45
C49 R15
JP14 Always ON
JP16 Always ON
D_Zener D5
D26 NMOS Q3
OPTIONAL
C54
R19

U11
MCP2676FDxMF
100n

C125
C125
100u

LT8411-1A

J24 J24
Motor Controller Enable

J2 J1 J3 J4 J5 J6
J2 J1 J3 J4 J5 J6
Phase Phase Phase Phase Phase Phase W H

C24 2u2
U2
100n
22n C26
C27
C31
Driver Control Mode Selection
LM4040DYM3-2.5-TR JP11
JP11

C114
C112 U19
U19
Buck-Reg
AZ1084-5.0
U20 Reg Bypass
C117 U20
AZ1084-3.3
JP20

100n
C35 U3
100n
C36
100n C39
C37
U3
STM32G474RETx
600@100MHz 1A
C38
4u7
C33

C129 C131
100n 100n
U21
C128 C130
100n 100n
C132
R31
JP18
J12
JP17
U8
J13
Jump 5V Jump 5V Jump 12V Jump 5V
GPIO2

U4
M24C01-RMN

J11
J21
USB_C_Receptacle USB2.0 14P
USB_C_Receptacle USB2.0 14P

J25
J25
Motor Power Connector

University of Alberta EcoCar Team
Sheet:
File: Motor Controller.kicad_pcb
Title: HyperDrive Motor Controller
Size: A4   Date: Rev: Mk. 1
KiCad E.D.A. 8.0.3   Id: 1/1

ecocar

C122
C122
470u

C51 C51 100u

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