GND GND

C22 100nF  C21 10uF

VCC3V3

R14 0R

AS5600VDD  AS5600VDD3v3  AS5600VDD

AS5600VDD

GND

R13 10k  R12 10k

U9 AS5600-ASOT

AS5600VDD
AS5600VDD3v3

VDD5V  DIR
VDD3V3  SCL
OUT  SDA
GND  PGO

SCL
SDA

GND

R15 1k

GND

J4 HDR-M-2.54_1x2
PB6(U1TX)
PB7(U1RX)

J5 HDR-M-2.54_1x2
CANH
CANL

J2 HDR-M-2.54_1x3
VCC5
VCC3V3

GND

VCC3V3

J3 HDR-M-2.54_1x4
C7 100nF
SWIO
SWCLK

GND

J6 HDR-M-2.54_1x3
M_U
M_V
M_W

VCC12V

J1 HDR-M-2.54_1x2

GND

VCC12V

C14 10uF

U2 TJA1050T/CM,118

GND  GND

C8 100nF

CANTX  TXD
GND
OSCIN  VCC  CANH
RESET  RXD  CANL
VREF

VCC5

CANH
CANL

U8 INA199B1DCKR
ref  M_U
L_U

GND
C19 100nF
VCC5

REF  OUT
IN1
GND  IN-
V+  IN+

R9 R025

OUT1

U1 STM32F103C8T6

VBAT
PC14  PC13-TAMPER-RTC
PC15  PC14-OSC32_IN
OSCIN  PC15-OSC32_OUT
OSCOUT  PD0-OSC_IN
RESET  PD1-OSC_OUT
VSSA
VCC3V3  VDDA
L_U  PA0-WKUP
L_V  PA1
L_W  PA2
ref  PA3
PA4
PA5
PA6
PA7
PB0
PB1
BOOT1  PB2
PB10
PB11
VCC3V3  VSS_1
VDD_1

VDD_3
VSS_3
PB9
PB8
BOOT0
PB7(U1RX)
PB6(U1TX)
PB5
PB4
PB3
PA15
PA14
VDD_2
VSS_2
PA13
PA12
PA11
PA10
PA9
PA8
PB15
PB14
PB13
PB12

VCC3V3
GND
SDA
SCL

SWCLK
GND
SWIO

CANTX
CANRX
TIM1_CH3
TIM1_CH2
TIM1_CH1

GND

VCC3V3

R3 10k  RESET

SW1 TS-1101-C-W
C9 1uF

GND

U7 INA199B1DCKR
ref  L_V
M_V

GND
C18 100nF
VCC5

REF  OUT
IN1
GND  IN-
V+  IN+

R8 R025

OUT2

U6 INA199B1DCKR
ref  L_W
M_W

GND
C17 100nF
VCC5

REF  OUT
IN1
GND  IN-
V+  IN+

R5 R025

OUT3

U3 DRV8313PWPR

C16 100nF  C15 10nF

CP1  EP
CP2  GND
VCP  IN1
VM  EN1
OUT1  IN2
PGND1  EN2
PGND2  IN3
OUT2  EN3
OUT3  GND
NC  COMPO#
PGND3  FAULT#
VM  SLEEP#
COMPP  RESET#
COMPN  V3P3OUT

TIM1_CH1
TIM1_CH2
TIM1_CH3

OUT1
OUT2
OUT3

R7 1.2k

R4 1.2k

C12 100pF

GND

U4 AMS1117-3.3

GND  GND
C13 10uF
GND  VOUT
VOUT  VIN

C10 220uF  C11 100nF

VCC3V3

VCC5

VCC3V3  VCC3V3  VCC3V3  VCC3V3
C4 100nF  C1 100nF  C5 100nF  C6 100nF

GND  GND  GND  GND

VCC3V3

U10 OPA365AMDBVTEP
R10 100k

ref

R11 100k  C20 100nF

GND  GND  GND

R16 100k
BOOT1
R17 100k
BOOT0
GND

C2 22pF
OSCIN
U5 8MZ
R6 1M
C3 22pF
OSCOUT

GND