CUI UJ2-MIBH2-4-SMT-TR

J5
VCC 1
D- 2
D+ 3
ID 4
GND 5
SHD 6

MF-MSMF050-2 F1

USB_N
USB_P

5V D1 Vin
US-1G

C16 100uF x 50V
GND

L3 BLM18PG601SH1
D3 D4
CG0603MLC-05E CG0603MLC-05E
GND

Vin U6 3V3
7 +VIN OUT 8
1 NC NC 3
2 NC FB 4
6 GND ON/OFF 5
LM2594M-ADJ

L2 CDRH74NP-121MC-B
R12 5K6F 0603
C20 4.7nF
R13 3K32F K03
C21 0.1uF

C17 1uF*50V C18 68uF x 50V
10MQ040(60) D2
C19 100uF x 50V
GND

Vin
US-1G D5
12V D6
VS-30BQ060
SM6T18A D7
F2 MF-MSMF110

J1
1
2
3
4
CWF-4 CAN

CANH
CANL
GND

CAN GND
C22 0.1uF
3V3

U3
1 TXD S 8
2 GND CANH 7
3 VCC CANL 6
4 RXD VREF 5
SN65HVD230D
50mA @ max DOM

GND

R9 1206 120R
JP1
1
2
PLS-2 Terminator

CANH
CANL

C12 0.1 uF
GND

3V3 C23 0.1uF GND
R10 0603 10K

U5
1 TXCAN VDD 18
2 RXCAN RESET 17
3 CLKOUT/SOF CS 16
4 TX0RTS SO 15
5 TX1RTS SI 14
6 TX2RTS SCK 13
7 OSC2 INT 12
8 OSC1 RX0BF 11
9 VSS RX1BF 10
MCP2515
10mA

SS
MISO
MOSI
SCK
INT

CAN_CS
MISO
MOSI
SCK
CAN_INT

Y2 KX-K 16 MHZ
C10 22pF C11 22pF
GND

Title

Size A4
Number
Revision

Date: 26.07.2019
File: F:\PROJ\..\CAN.SchDoc
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Drawn By:

ENCODER

3V3

U2

1	VDD5V	DIR	8
2	VDD3V3	SCL	7
3	OUT	SDA	6
4	GND	PG0	5

AS5600

100 mA o burn peak
6.5mA @ NOM

C8
100 nF

C13
10uF

GND

GND

CCW
R1 0603 0 3V3

R2 0603 0 GND
CW

SCL
SDA

3V3

R3 R4
4K7 4K7

SCL
SDA

12V

U4   A4954

1	GND	VBB	16
2	VREF34	OUT4	15
3	IN3	LESS34	14
4	IN4	OUT3	13
5	IN2	OUT2	12
6	IN1	LSS12	11
7	VREF12	OUT1	10
8	GND	VBB	9

PAD

17

GND

GND

VREF2 VREF2
IN3   IN3
IN4   IN4
IN2   IN2
IN1   IN1
VREF1 VREF1

2B

R8 2512 0.25RF

2A
1B

R11 2512 0.25RF

1A

100uF x 50V + C14   C15
0.22uF

GND

J3

2B	1	
2A	2	1
1B	3	2
1A	4	3
		4

CWF-4

Comment	Description	Designator	Footprint	LibRef	Quantity
100nF		C1, C2, C3, C6	CHIP_C_0603	CHIP_C	4
22pF		C4, C5, C10, C11	CHIP_C_0603	CHIP_C	4
1uF		C7	CHIP_C_0603	CHIP_C	1
100 nF		C8	CHIP_C_0603	CHIP_C	1
0.1uF		C9, C21, C22, C23	CHIP_C_0603	CHIP_C	4
0.1 uF		C12	CHIP_C_0603	CHIP_C	1
10uF		C13	CHIP_C_0603	CHIP_C	1
100uF x 50V		C14, C16, C19	Tantal - D	Tantal	3
0.22uF		C15	CHIP_C_0805	CHIP_C	1
1uF*50V		C17	CHIP_C_0805	CHIP_C	1
68uF x 50V		C18	TANTAL - E	Tantal	1
4.7nF		C20	CHIP_C_0603	CHIP_C	1
US-1G		D1, D5	DO214-AC	US-1G	2
10MQ040(60)	Rectifier diode	D2	DO214-AC	10MQ040	1
CG0603MLC-05E		D3, D4	CG0603MLC-05E	SM6T27CA	2
VS-30BQ060	Schottky 3.0A	D6	DO-214AB	VS-30BQ060	1
SM6T18A		D7	DO-214AA	SM6T30A	1
MF-MSMF050-2		F1	SMDC014F-2	miniSMDC014F-2	1
MF-MSMF110		F2	SMDC014F-2	miniSMDC014F-2	1
CWF-4		J1, J3	CWF-4	CWF-4	2
PLS-5		J2	PLS-5	PLS-5	1
CWF-2		J4	CWF-2	CWF-2	1
CUI UJ2-MIBH2-4-SMT-TR	Micro USB connector	J5	UJ2-MIBH2-4-SMT	USB_micro	1
PLS-2		JP1	PLS-2	PLS-2	1
BLM18PG601SH1		L1, L3	CHIP_R_0603	BLM	2
CDRH74NP-121MC-B		L2	CDRH74	CDRH74	1
IRLML6402	p-chanal MOSFET	Q1	SOT23	IRLML6402	1
0		R1, R2	0R 0603	JANMP_0603	2
4K7		R3, R4	CHIP_R_0603	RES_0603	2
10K		R5, R6, R7, R10	CHIP_R_0603	RES_0603	4
0.25RF		R8, R11	CHIP_R_2512	RES_2512	2
120R		R9	CHIP_R_1206	RES_1206	1
5K6F		R12	CHIP_R_0603	RES_0603	1
3K32F		R13	CHIP_R_0603	RES_0603	1
???		RT1		thermoSensor	1
SAMD21G18A-AUT		U1	QFN48	SAMD21G18A-AUT	1
AS5600	program magnetic rotary position sensor	U2	SOIC8	AS5600	1
SN65HVD230D		U3	SOIC8	TJA1050	1
A4954	DMOS PWM Motor Driver	U4		A4954	1
MCP2515		U5	SOIC18	MCP2515	1
LM2594M-ADJ		U6	SOIC8	LM2594	1
32.768 KHz		Y1	NX3215SA	Quartz	1
KX-K 16 MHZ		Y2	CHIP_CRYSTAL_5032	Quartz	1