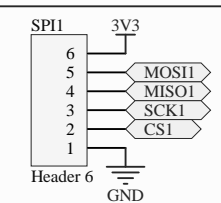
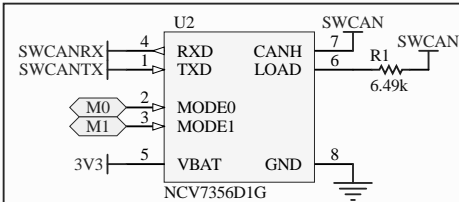


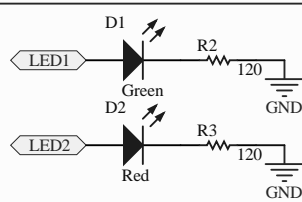
Voltage Regulator and Power Conditioning



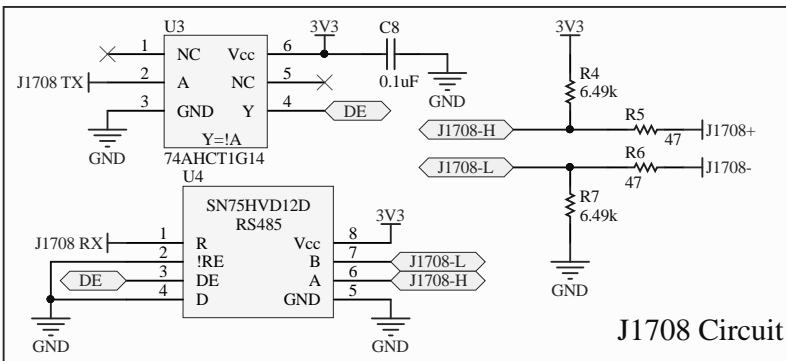
Breakout Header



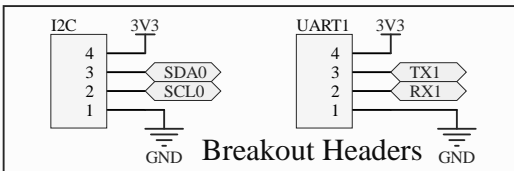
GMLAN



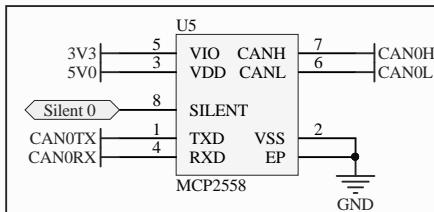
LED Indicators



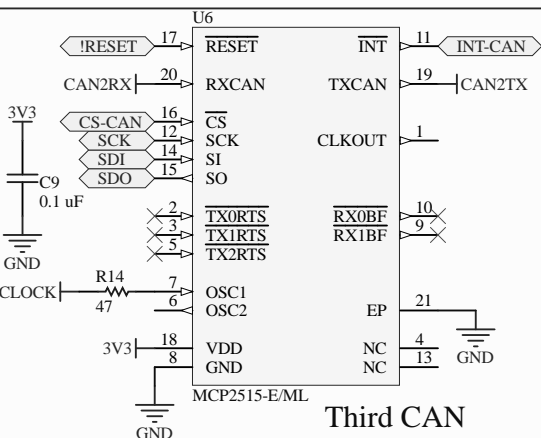
J1708 Circuit



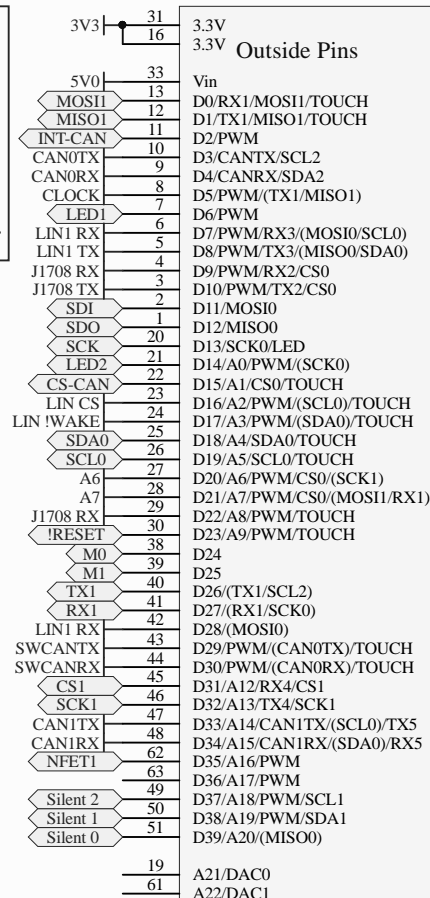
Breakout Headers



CAN Transceivers



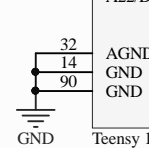
Third CAN



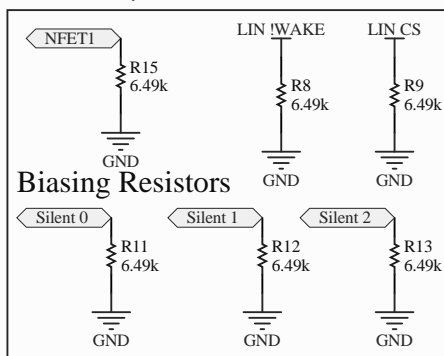
Teensy 3.6 32-Bit

Arduino-Compatible

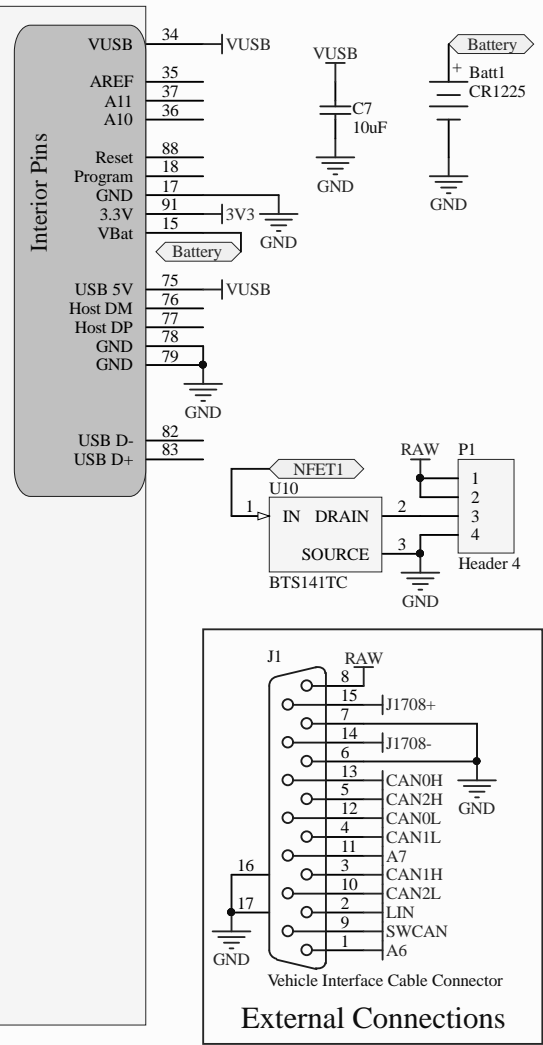
Microcontroller



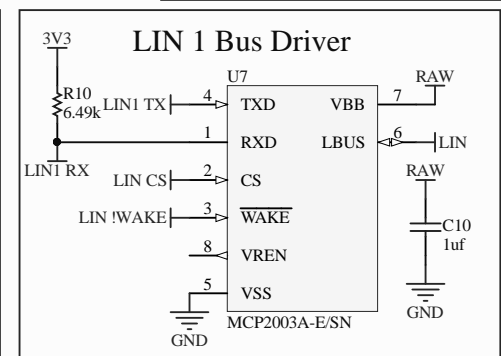
Teensy 1



Biasing Resistors



External Connections



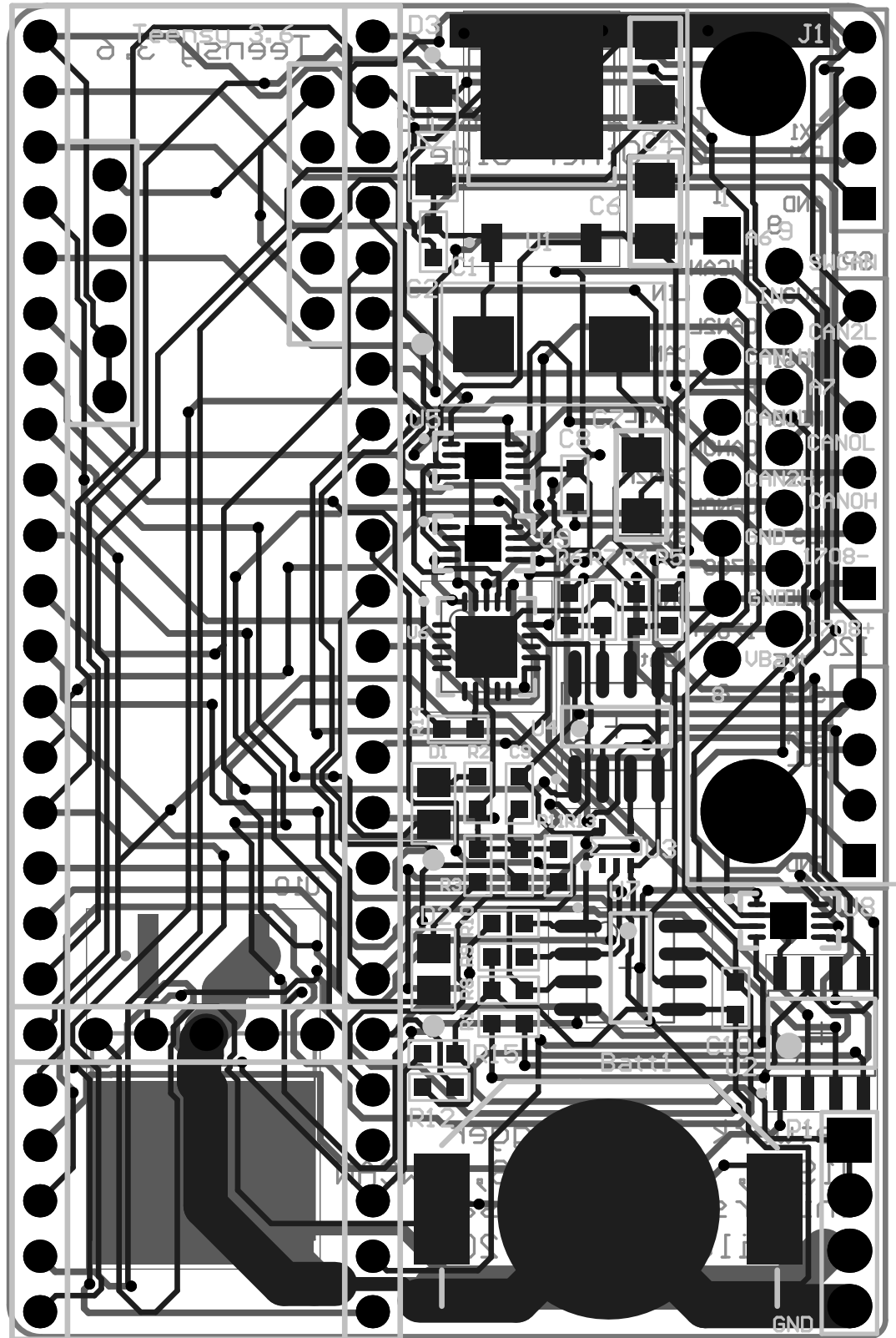
LIN 1 Bus Driver

Title: **Heavy Vehicle Network Data Recorder**Subtitle: **Hands-On Heavy Duty Networking**

Date: 6/25/2017 Time: 10:30:13 PM Size: Letter Sheet 1 of 1

File: C:\Users\dailyadmin\Dropbox (JHSI)\Electronics\Flat Teensy 3.6 J1939 Logger\Teensy 3.6 with J1939 with NFETs.SchDoc

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Item #	mn Name Error:Manufa	#Column Name Error:Manufacturer No	Quantity	#Column Name Error:Note	Designator	Description	Footprint	Comment	LibRef
1			1		Batt1	Lithium Battery Non-Rechargeable (Primary) 3V Coin, 12.5mm	Battery Clip - CR1225	CR1225	CR2032 Battery Holder
2			2		C1, C9	CAP CER 0.1uF 50V X7R 0603	0603	0.1 uF	Cap
3			1		C2	Tantalum Capacitors - Solid SMD 35volts 47uF 10% ESR=300mOhms	2917	47 uF	Tantalum Cap_1
4			3		C4, C6, C7	10uF ±20% 50V Ceramic Capacitor X5R 1206 (3216 Metric)	1206	10uF	Cap
5			1		C8	CAP CER 0.1uF 50V 10% X7R 0603	0603	0.1uF	Cap
6			1		C10	1uF ±20% 50V Ceramic Capacitor X5R 0603 (1608 Metric)	0603	1uF	Cap
7			1		D1	LED RED DIFFUSED 0805 SMD	0805 Polarized	Green	LED - SMD
8			1		D2	LED RED DIFFUSED 0805 SMD	0805 Polarized	Red	LED - SMD
9			1		D3	Diode Schottky 40V 2A Surface Mount DO-214AC (SMA)	SMA with A and K	CDBA240LL-HF	Schottky Diode
10			3		I2C, P1, UART1	Header, 4-Pin	HDR1X4	Header 4	Header 4
11			1		J1	Receptacle Assembly, 15 Position, Right Angle	DSUB1.385-2H15	Vehicle Interface Cable Connector	D Connector 15
12			10		R1, R4, R7, R8, R9, R10, R11, R12, R13, R15	6.49k Ohm ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive AEC-Q200 Thick Film	0603	6.49k	Chip Resistor
13			2		R2, R3	120 Ohm ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive AEC-Q200 Thick Film	0603	120	Chip Resistor
14			3		R5, R6, R14	RES SMD 47 OHM 1% 1/10W 0603	0603	47	Chip Resistor
15			1		SPH1	Header, 6-Pin	HDR1X6	Header 6	Header 6
16			1		Teensy 1	32 Bit Arduino-Compatible Microcontroller	Teensy 3.6 Through Hole - No Labels	Teensy 3.6 Through Hole	Teensy 3.6 Through Hole
17			1		U1	Low Dropout Linear Fixed Voltage Regulator, 5 Vout, -40 to 150 degC, PG-TO252-3, Reel, Green	INF-PG-TO252-3-11_N	TLF80511TF V50	TLF80511TF V50
18			1		U2	Single Wire CAN Transceiver, 5 to 27 V, 8-Pin SOIC, Pb-Free, Tube	ONSC-SOIC-8-751-07_V	NCV7356D1G	NCV7356D1G
19			1		U3	IC SCHMIT-TRIGG INV GATE SOT353	SOT-353	74AHCT1G14	74AHCT1G14 Inverter
20			1		U4	IC RS485 TXRX 3/5V 8-SOIC	SOIC-SN8_N	SN75HVD08DR	SN75HVD12D (3.3v RS485)
21			3		U5, U8, U9	Microchip CAN FD Transceiver with Silent Mode	TDFN	MCP2558	MCP2558FD
22			1		U6	CAN Controller CAN 2.0 SPI Interface 20-QFN (4x4)	QFN-ML20_M	MCP2515-E/ML	MCP2515-E/ML
23			1		U7	LIN J2602 Transceiver, 8-Pin SOIC, Extended Temperature, Tape and Reel	SOIC-SN8_N	MCP2003A-E/SN	MCP2003AT-E/SN
24			1		U10	Smart Low-Side Power Switch HITFET, 60 V VDS, 12 A ID, -40 to 150 degC, PG-TO263-3-2, Reel, Green	INF-PG-TO263-3-2_N	BTS141TC	BTS141TC