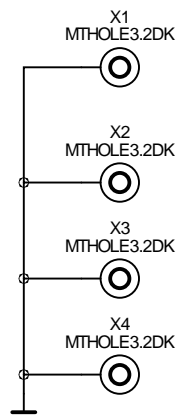


PCB TMC6130-EVAL V2.1, 115x85x1.7mm, 4 layers, white solder mask, black silkscreen


Stencil Top TMC6130-EVAL V2.1

Stencil Bottom TMC6130-EVAL V2.1



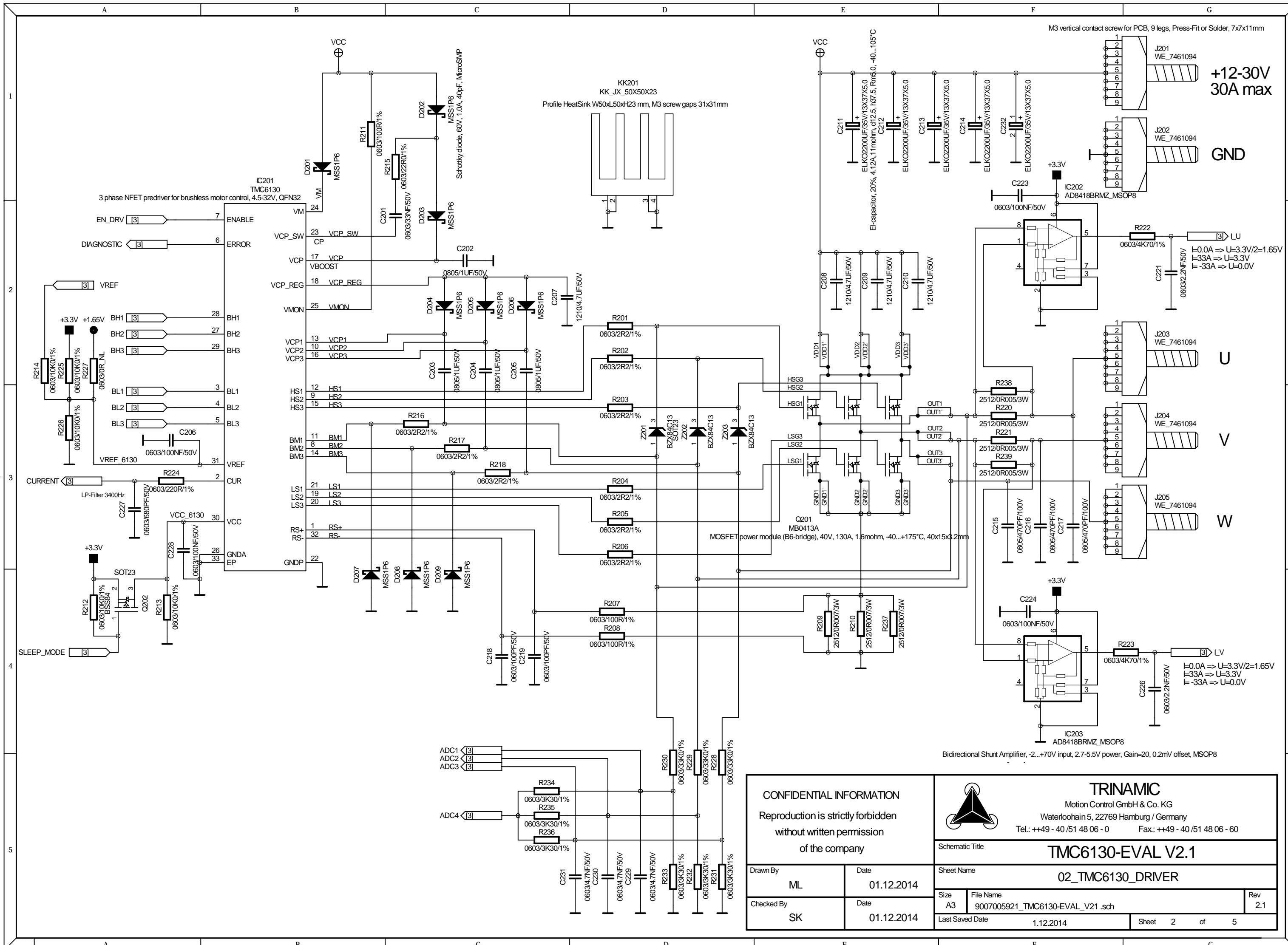
Revision-History

Datum	Changes
6.03.2013	Start design L501 type changed
11.03.2013	Version 00B LIN-transceiver IC502 changed from TH8080 to MLX80020, Q501 removed
12.03.2013	Version 10 Release C311, C312 changed from 22pF to 15pF R601 changed from 1kohm to 1.1kohm
13.09.2013	Version 10C Sheet 5 (CAN, LIN, Single Wire CAN drivers IC501, IC502, IC503, J501 removed) Green led D305 added Programming header J301 added Current sense amplifiers IC202, IC203 added Low pass filter R224, C227 added to PWM-signal CURRENT Headers X201...X204 added for measuring all TMC6130 signals C228 added 1.65V voltage regulator IC603 added Current sense amplifiers IC202, IC203 added
30.09.2013	Version 10D RXD and TXD signals swapped in debug header J302, D306, D307 added for ESD-protection Signal DIAGNOSTIC reconnected from PB12 to PB7 (TIM4_CH2) Signal labels of processor ports corrected
02.10.2013	Version 11 Release Empty sheet 05-RS232 removed
02.10.2013	Version 12 Release Components below heat sink moved from TOP side to BOTTOM side. Only layout change
1.11.2013	Version 13 Release Copper tracks below heat sink moved from TOP side inside the board. C211...C214 manufacturer code changed from 63YXF470MEFC12.5X25 to 63YXJ470M12.5X25 Part attributes updated with DigiKey codes
05.03.2014	Version 13A Pin headers of the TMC6130 signals X201...X204 removed OCIN signal, R219, C220 removed Added virtual start point measurement circuit Processor IC301, STM32F205RBT6 changed to STM32F405RGT6 +5V regulator LM5008 changed to LM2841 EN_DRV reconnected, signals on analog inputs of processor reconnected
24.03.2014	Version 14 Release C208, C209, C210 changed from 1210/2.2UF/100V to 1210/4.7UF/50V C302, C304, C305, C605, C606 changed from 0805/10UF/16V to 0805/22UF/10V
25.11.2014	Version 21A Processor type changed from STM32F405RGT6 to Freescale MK20DX256VLL10 C211...C214, 4x 470uF/63V/2A/43mohm replaced with 6 x1000uF/35V/2.6A/18mohm Shunt amplifiers IC202, IC203 changed from AD8206YRZ (SO8) to AD8418BRMZ (MSOP8) Additional shunt resistors R237, R238, R239 added Pin-header J303 added to PWM-signals TP601...TP608 added Input voltage measurement circuit R608, R609 added OUT_0_PWM signal added ADC1...4 signals connected to processor
26.11.2014	Version 21B Attribute updates
26.11.2014	Version 21C Z201, 201, 203 packages changed from SOD-80 to SOT23 C211...C214, C232, 233 1000uF/35V/2.6A/18mohm replaced with 2200uF/35V/4.12A/11mohm C233 removed Q201 MOSFET bridge MB0813A (80V) changed to MB0413A (40V)
01.12.2014	Version 21D J303 changed from 6-pin to 8-pin header, DIAGNOSTIC signal and GND added J302 changed from 4-pin to 8-pin header. Signals PTD1, PTD2, PTD3 added R209, R210, R237 changed from 10mohm to 7mohm
01.12.2014	Version 21 Release


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Drawn By ML	Date 01.12.2014	Sheet Name 01_REVISION-HISTORY	
Checked By SK	Date 01.12.2014	Size A3	File Name 9007005921_TMC6130-EVAL_V21 .sch
Last Saved Date 1.12.2014		Sheet 1	of 5
		Rev 2.1	

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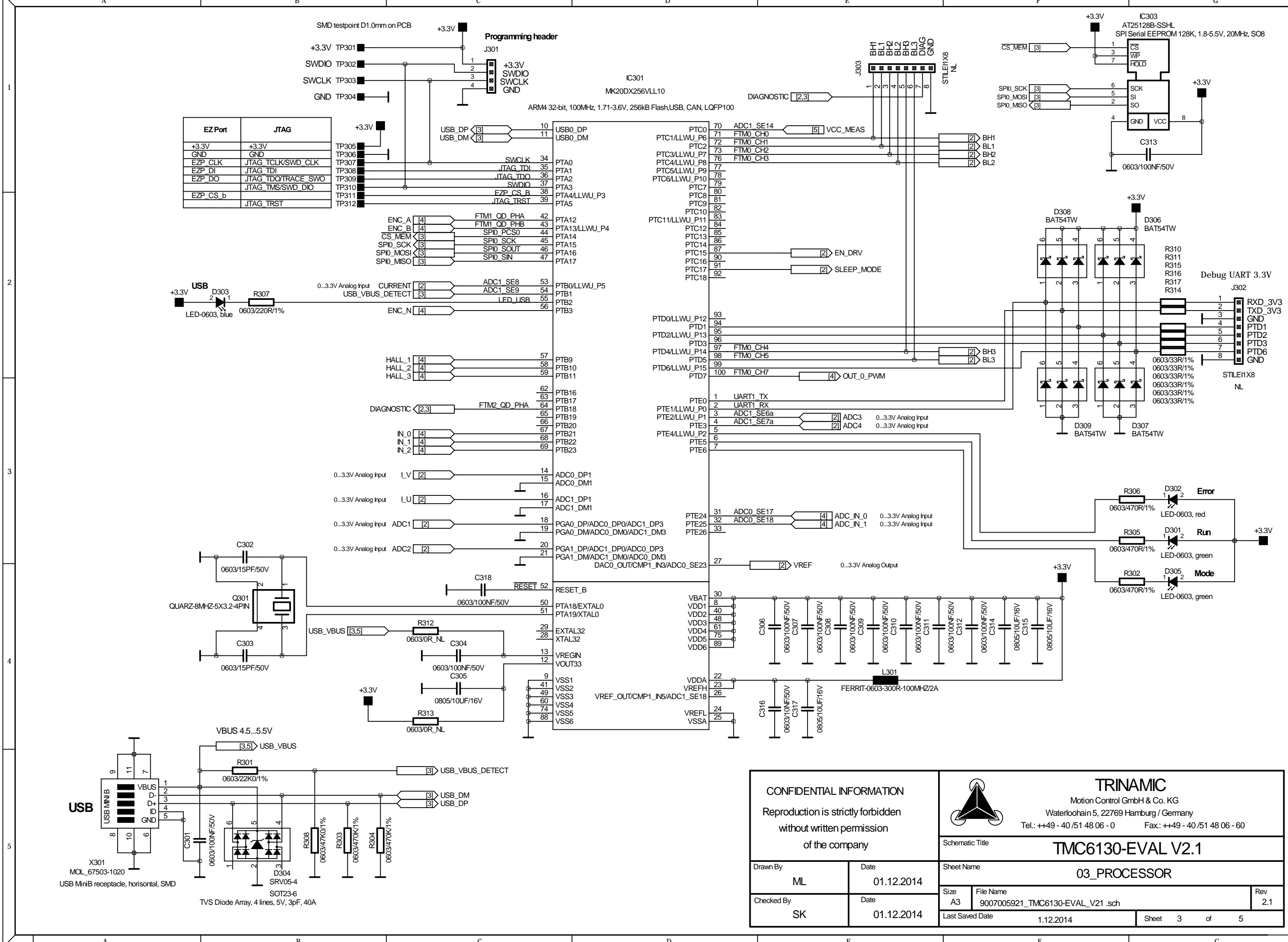
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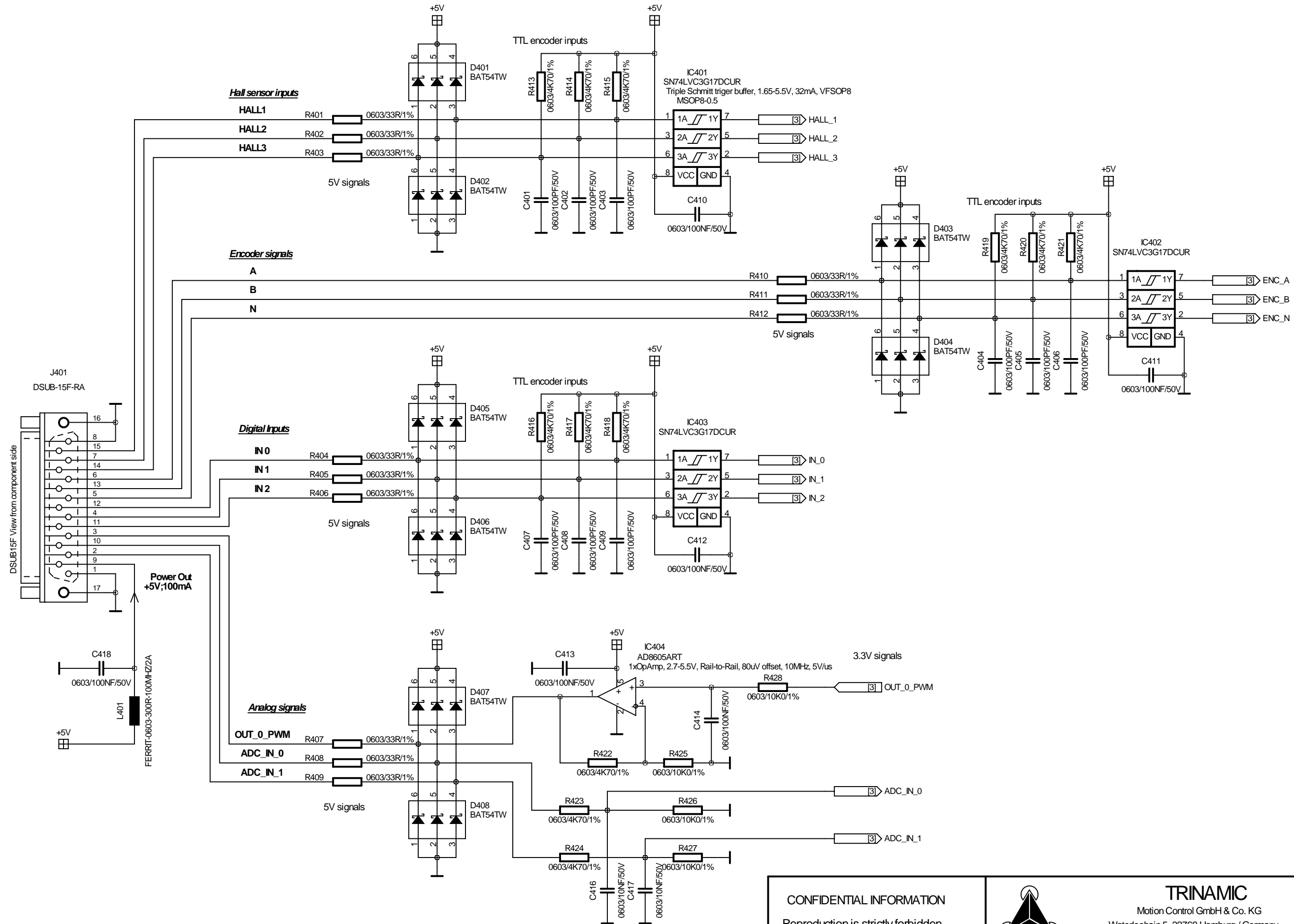
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Last Saved Date 1.12.2014 Sheet 2 of 5	


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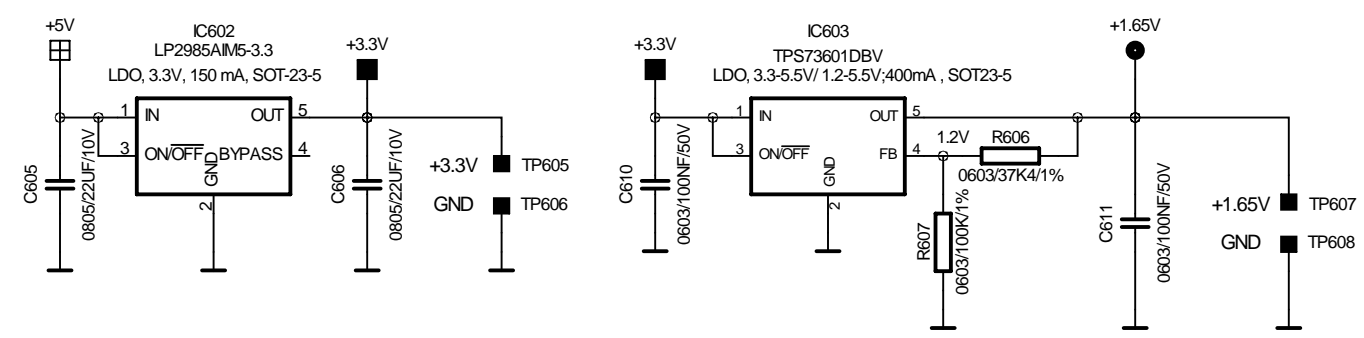
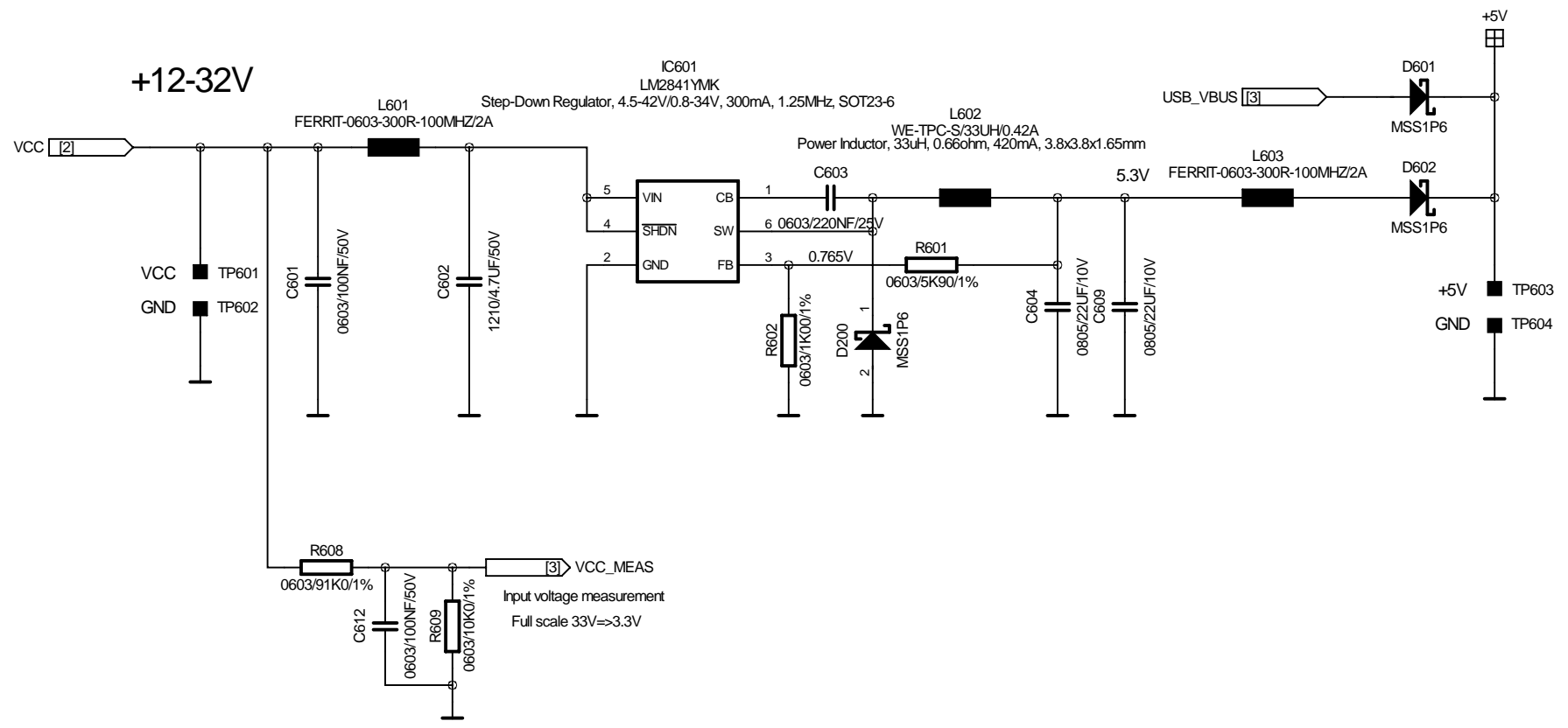



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Size A3	File Name 9007005921_TMC6130-EVAL_V21 .sch	Last Saved Date 1.12.2014	Rev 2.1
Sheet 3 of 5		Sheet 3 of 5	

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