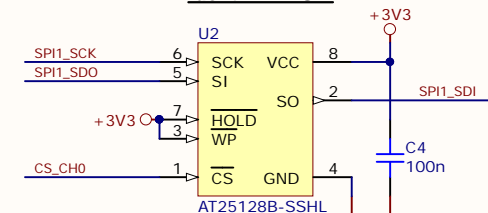
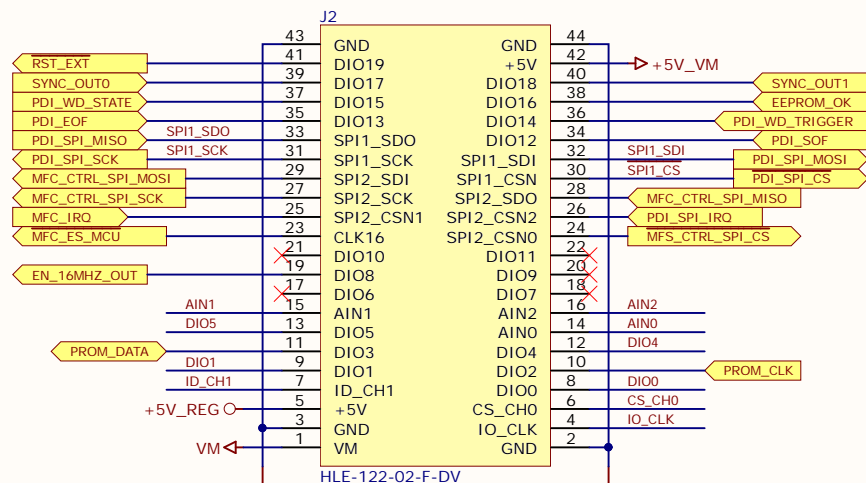


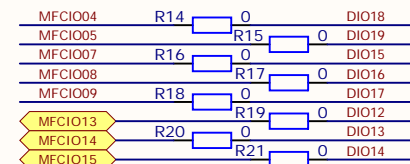
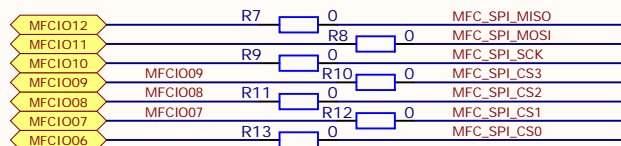
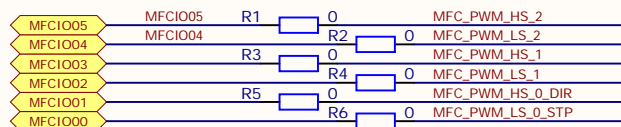
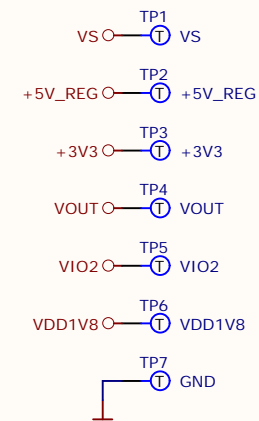
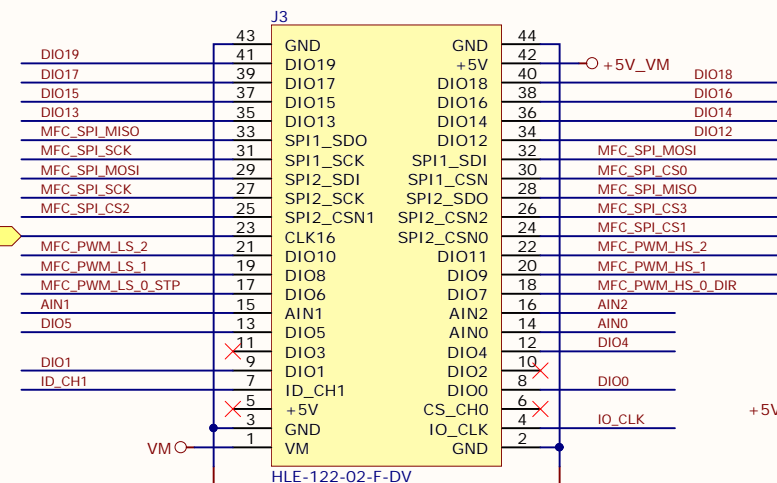
Ident EEPROM



Left Connector (uC)



Right Connector (DRV)



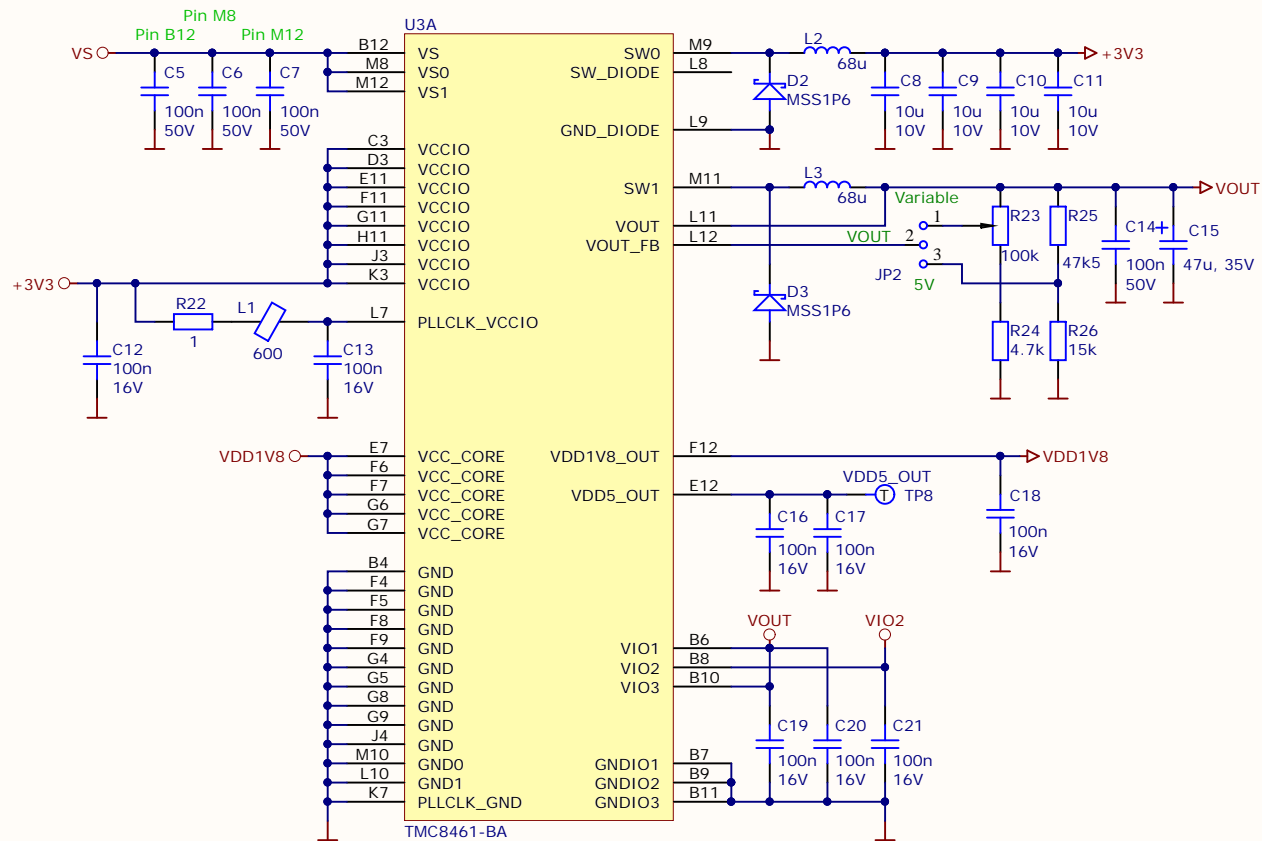
Drafted by: Peep Narusberg
 Checked by: ---
 Approved by: Stephan Kubisch

Title TMC8461-EVAL Main Connectors

Size: A4 Revision: V3.0 [No Variations]
 Date: 1.03.2018 Time: 14: 25: 59 Sheet 1 of 7
 File: TMC8461-EVAL-V3.0 Main.SchDoc



Waterloohain 5
 22769 Hamburg
 Germany
tmc_info@trinamic.com

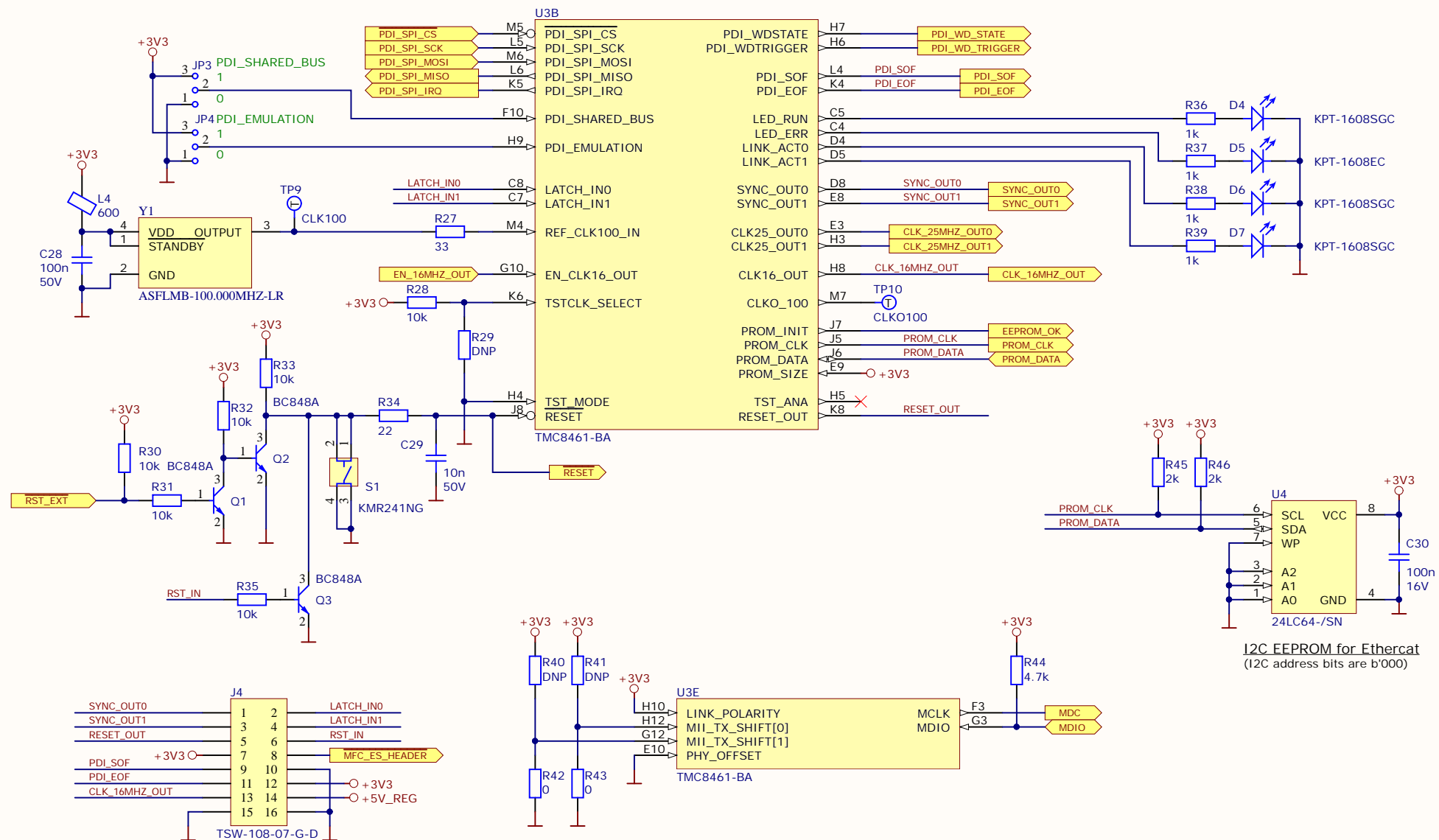


Drafted by: Peep Narusberg
 Checked by: ---
 Approved by: Stephan Kubisch

Title TMC8461-EVAL Power Supply		
Size: A4	Revision: V3.0	[No Variations]
Date: 1.03.2018	Time: 14: 25: 59	Sheet 2 of 7
File: TMC8461-EVAL-V3.0 Power .SchDoc		



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 22769 Hamburg
 Germany
tmc_info@trinamic.com



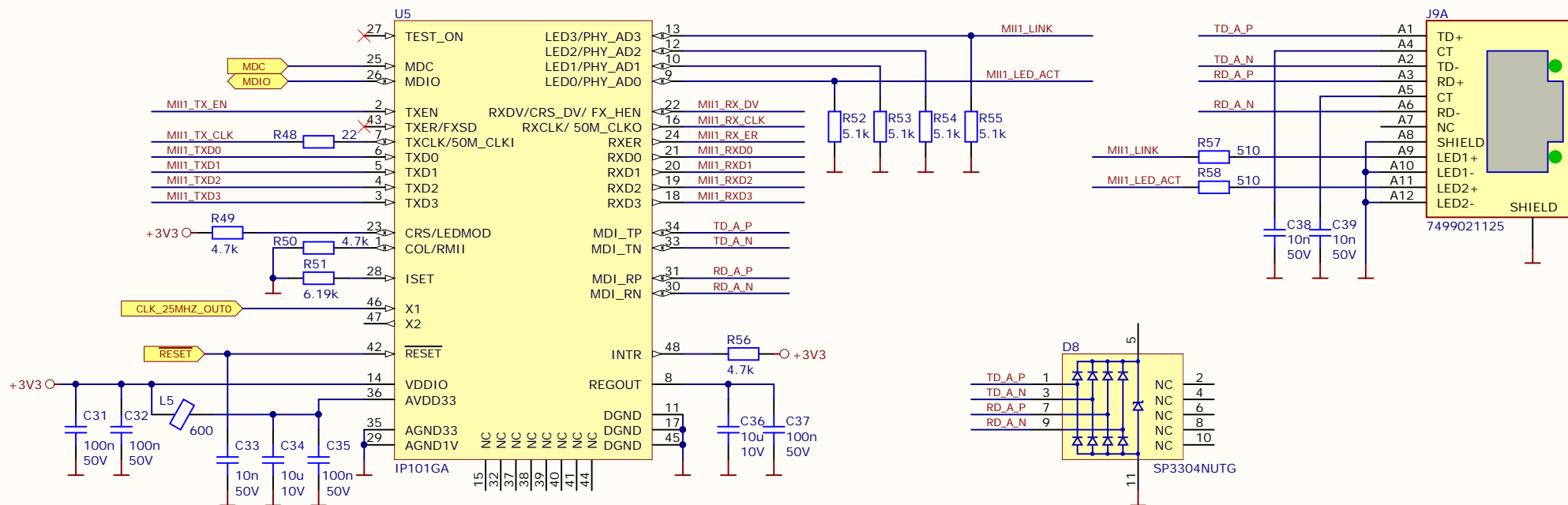
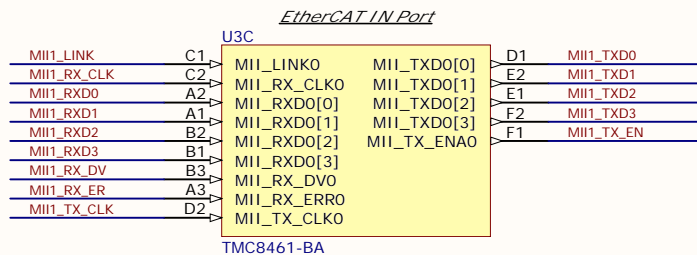
Drafted by: Peep Narusberg
 Checked by: ---
 Approved by: Stephan Kubisch

Title **TMC8461-EVAL PDI I/Os to/from MCU**

Size: **A4** Revision: **V3.0** [No Variations]
 Date: **1.03.2018** Time: **14:26:00** Sheet **3** of **7**
 File: **TMC8461-EVAL-V3.0_Control.SchDoc**



Waterloohain 5
 22769 Hamburg
 Germany
tmc_info@trinamic.com




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 Checked by: ---
 Approved by: Stephan Kubisch

Title TMC8461-EVAL PHY IN Port		
Size: A4	Revision: V3.0	[No Variations]
Date: 1.03.2018	Time: 14: 26: 00	Sheet 5 of 7
File: TMC8461-EVAL-V3.0 PHY IN.SchDoc		

TRINAMIC
 MOTION CONTROL

Waterloohain 5
 22769 Hamburg
 Germany
tmc_info@trinamic.com

1	2	3	4												
A	<div>TMC8462 V2.0 -> TMC8462-EVAL V3.0</div> <div>1. Corrected RJ-45 connectors pinout</div> <div>2. Changed MII2_LED_ACT to J9B pin B12 and pin B11 to +3V3</div> <div>3. Added protective TVSs to Ethernet signals</div> <div>TMC8462 V0.9pre2 -> TMC8462-EVAL V2.0</div> <div>1. Changed oscillator Y1 to 100MHz in 3.2 x 2.5mm case</div> <div>2. Renamed the pin REF_CLK25_IN to REF_CLK100_IN in symbol</div> <div>3. Connected TSTCLK_SELECT pin over pullu-up to +3V3, over DNP resistor to GND</div> <div>4. Deleted inversion from signal RESET_OUT</div> <div>5. Renamed the signal NRST to NRESET</div> <div>6. Added reset signal RST_IN to pin 6 of J4</div> <div>7. Added inverting stage with BC848A to connect RST_IN to NRESET</div> <div>8. Added mounting hole symbols to sheet 1</div> <div>9. Renumbered resistors</div> <div>V0.9pre6 -> V0.9pre7</div> <div>1. Removed RGB LED with resistorsl</div> <div>2. Removed CS_CHO signal from right connector</div> <div>3. Removed power LED</div> <div>4. Renumbered components (diodes, resistors)</div> <div>5. Swap for SPI signals on J2 pins 28 & 29</div> <div>V0.9pre5 -> V0.9pre6</div> <div>1. Removed IRQ LED with resistor</div> <div>2. Added ID circuit EEPROM to sheet 1</div> <div>3. Renumbered components</div> <div>V0.9pre4 -> V0.9pre5</div> <div>1. Added TP for VIO2, renumbered TPs</div> <div>2. Added descriptive text for JP5</div> <div>V0.9pre3 -> V0.9pre4</div> <div>1. Corrected TPs</div> <div>2. Corrected J2 and J3 pin 1 net names to VM</div> <div>3. Changed on J2 and J3 pin 42 net names to +5_VM</div> <div>4. Corrected R63 and R65 connections</div> <div>V0.9pre2 -> V0.9pre3</div> <div>TMC8461 sheet element:</div> <div>1. Changed port name CLK_IN_EN_100 to TSTCLK_SELECT</div> <div>2. Changed port name LED_ACT0/LED_ACT1 to LINK_ACT0/LINK_ACT1</div> <div>3. Changed port name CLKIO_100 to CLKO_100</div> <div>4. Changed port name MII_RXERR0 to MII_RX_ERR0</div> <div>5. Changed port name MII_RXERR1 to MII_RX_ERR1</div> <div>Page 1:</div> <div>6. Connected Pin 3 of JP1 to VOUT</div> <div>7. Changed net name on R7 from MFC_PWM_LS_0_DIR to MFC_PWM_LS_0_STP</div> <div>8. Connected J2 and J3 pins 4, 6, 7, 8, 9, 12, 13, 14, 15 and 16 in pairs, used net names from pin names</div> <div>Page 2:</div> <div>9. Added descriptive text to JP2</div> <div>Page 3:</div> <div>10. Added descriptive text for JP3</div> <div>11. Added descriptive text for JP4</div> <div>12. Added test point for the clock signal from Y1</div> <div>13. Changed LED D6 to red</div> <div>14. Changed R38 and R39 to DNP</div> <div>15. Added additional OR resistors from MII_TX_SHIFT[0] and MII_TX_SHIFT[1] to GND</div> <div>Page 6:</div> <div>16. Changed R63 to pull-up resistor to +3V3</div> <div>All sheets:</div> <div>17. Renumbered resistors</div>	<div>V0.9pre1 -> V0.9pre2</div> <div>Sheet 1</div> <div>1. Reduced the capacitor on the output of the LM7805 to 10µF</div> <div>2. Removed the capacitor on +5V_VS</div> <div>3. Changed the resistor on the +5V_VS LED to 10k</div> <div>4. Changed VS on JP1 to VOUT</div> <div>5. Renamed +5V_VS to VIO2</div> <div>6. Corrected EN_CLK16_OUT signal direction on the left connector pin 19</div> <div>7. Named signal on the left connector pin 25 to MFC_IRQ</div> <div>8. Named signal on both connectors pin 42 to +5V_VM</div> <div>9. Set sinal name on the right connector pin 17 to MFC_PWM_LS_0_STP</div> <div>10. Set the signal on TP7 to +3V3</div> <div>Sheet 2:</div> <div>1. Renamed supply +5V_REG to VIO2</div> <div>Sheet 3:</div> <div>1. Connected CLK_IN_EN_100 (Ball K6) to GND</div> <div>2. Set testpoint with name CLKO_100 to pin CLKIO_100 (Ball H8)</div> <div>3. connected signal from Pin CLK16_OUT to the right connector (CLK16, Pin 23)</div> <div>Sheet 4:</div> <div>1. Change +5V_REG to VIO2 on the second MFCIO HV header</div> <div>Sheet 6</div> <div>1. Corrected net name MII2_LINK</div> <div>ToDo:</div>	<div><div>Drafted by: Peep Narusberg</div><div>Checked by: ---</div><div>Approved by: Stephan Kubisch</div></div> <div><table><tr><td colspan="3">Title TMC8461-EVAL log and approval</td></tr><tr><td>Size: A4</td><td>Revision: V3.0</td><td>[No Variations]</td></tr><tr><td>Date: 1.03.2018</td><td>Time: 14: 26: 01</td><td>Sheet 7 of 7</td></tr><tr><td colspan="3">File: TMC8461-EVAL-V3.0 Log.SchDoc</td></tr></table><div><div>TRINAMIC MOTION CONTROL</div><div>Waterloohain 5 22769 Hamburg Germany tmc_info@trinamic.com</div></div></div>	Title TMC8461-EVAL log and approval			Size: A4	Revision: V3.0	[No Variations]	Date: 1.03.2018	Time: 14: 26: 01	Sheet 7 of 7	File: TMC8461-EVAL-V3.0 Log.SchDoc		
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Size: A4	Revision: V3.0	[No Variations]													
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