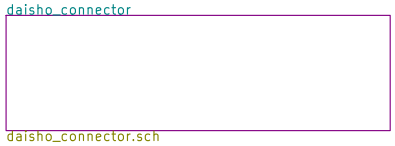

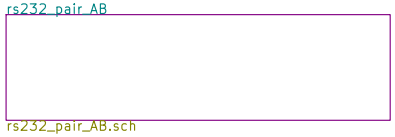

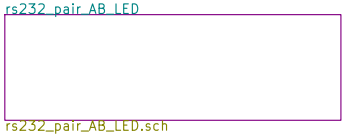

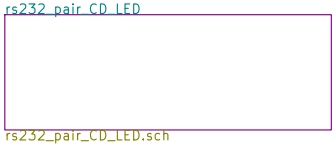

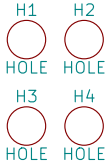

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File: rs232_fe.sch
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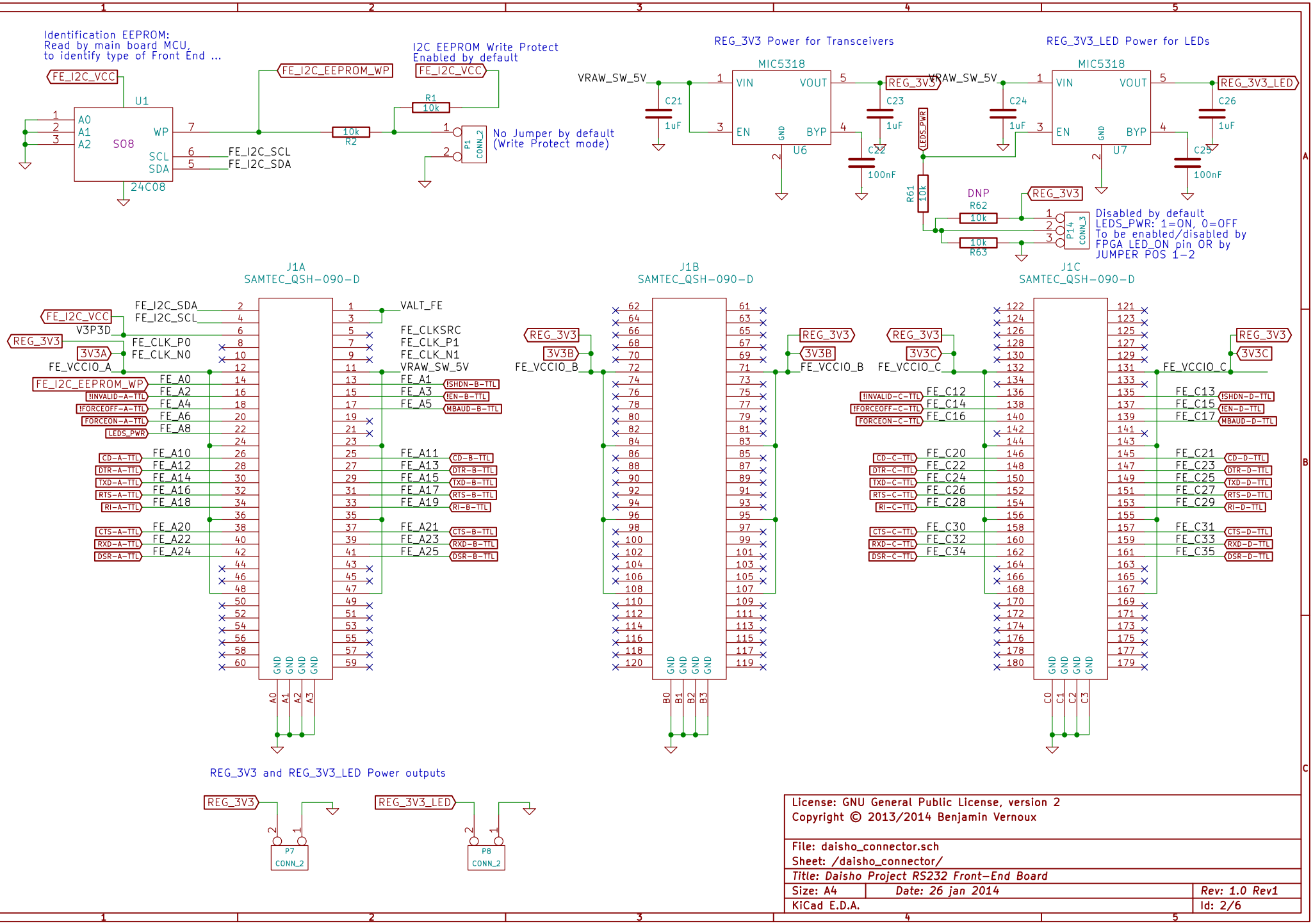
Title: Daisho Project RS232 Front-End Board

Size: A4	*Date: 26 jan 2014*	*Rev: 1.0 Rev1*
KiCad E.D.A.		Id: 1/6


Identification EEPROM:
Read by main board MCU,
to identify type of Front End ...
FE_I2C_VCC
U1
A0
A1
A2
SO8
WP
SCL
SDA
24C08
FE_I2C_EEPROM_WP
10k
R2
FE_I2C_SCL
FE_I2C_SDA
I2C EEPROM Write Protect
Enabled by default
FE_I2C_VCC
R1
10k
P1
CONN_2
No Jumper by default
(Write Protect mode)
REG_3V3 Power for Transceivers
MIC5318
VRAW_SW_5V
VIN
VOUT
EN
GND
BYP
U6
C21
1uF
C23
1uF
C22
100nF
REG_3V3
REG_3V3_LED Power for LEDs
MIC5318
U7
C24
1uF
C26
1uF
C25
100nF
REG_3V3_LED
LEDS_PWR
R61
10k
DNP
R62
10k
R63
10k
P14
CONN_3
Disabled by default
LEDS_PWR: 1=ON, 0=OFF
To be enabled/disabled by
FPGA LED_ON pin OR by
JUMPER POS 1-2
J1A
SAMTEC_QSH-090-D
J1B
SAMTEC_QSH-090-D
J1C
SAMTEC_QSH-090-D
FE_I2C_VCC
V3P3D
REG_3V3
3V3A
FE_VCCIO_A
FE_I2C_EEPROM_WP
!INVALID-A-TTL
!FORCEOFF-A-TTL
FORCEON-A-TTL
LEDS_PWR
CD-A-TTL
DTR-A-TTL
TXD-A-TTL
RTS-A-TTL
RI-A-TTL
CTS-A-TTL
RXD-A-TTL
DSR-A-TTL
FE_I2C_SDA
FE_I2C_SCL
FE_CLK_P0
FE_CLK_N0
FE_A0
FE_A2
FE_A4
FE_A6
FE_A8
FE_A10
FE_A12
FE_A14
FE_A16
FE_A18
FE_A20
FE_A22
FE_A24
VALT_FE
FE_CLKSRC
FE_CLK_P1
FE_CLK_N1
VRAW_SW_5V
FE_A1
FE_A3
FE_A5
FE_A11
FE_A13
FE_A15
FE_A17
FE_A19
FE_A21
FE_A23
FE_A25
!SHDN-B-TTL
!EN-B-TTL
MBAUD-B-TTL
CD-B-TTL
DTR-B-TTL
TXD-B-TTL
RTS-B-TTL
RI-B-TTL
CTS-B-TTL
RXD-B-TTL
DSR-B-TTL
GND
A0
A1
A2
A3
REG_3V3
3V3B
FE_VCCIO_B
B0
B1
B2
B3
REG_3V3
3V3C
FE_VCCIO_C
!INVALID-C-TTL
!FORCEOFF-C-TTL
FORCEON-C-TTL
CD-C-TTL
DTR-C-TTL
TXD-C-TTL
RTS-C-TTL
RI-C-TTL
CTS-C-TTL
RXD-C-TTL
DSR-C-TTL
FE_C12
FE_C14
FE_C16
FE_C20
FE_C22
FE_C24
FE_C26
FE_C28
FE_C30
FE_C32
FE_C34
FE_C13
FE_C15
FE_C17
FE_C21
FE_C23
FE_C25
FE_C27
FE_C29
FE_C31
FE_C33
FE_C35
!SHDN-D-TTL
!EN-D-TTL
MBAUD-D-TTL
CD-D-TTL
DTR-D-TTL
TXD-D-TTL
RTS-D-TTL
RI-D-TTL
CTS-D-TTL
RXD-D-TTL
DSR-D-TTL
C0
C1
C2
C3
REG_3V3 and REG_3V3_LED Power outputs
REG_3V3
REG_3V3_LED
P7
CONN_2
P8
CONN_2
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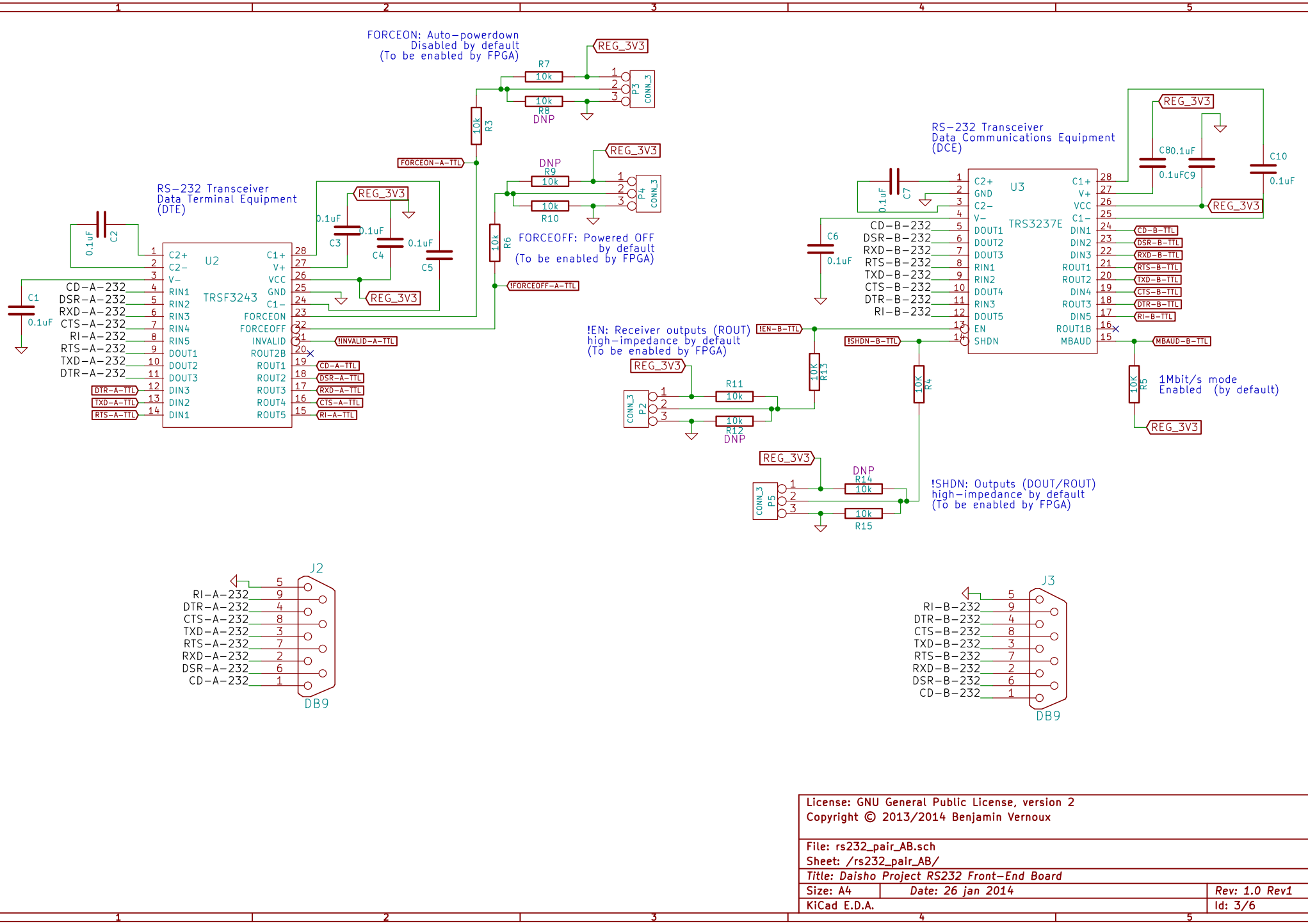
File: daisho_connector.sch
Sheet: /daisho_connector/
Title: Daisho Project RS232 Front-End Board
Size: A4
Date: 26 jan 2014
Rev: 1.0 Rev1
KiCad E.D.A.
Id: 2/6



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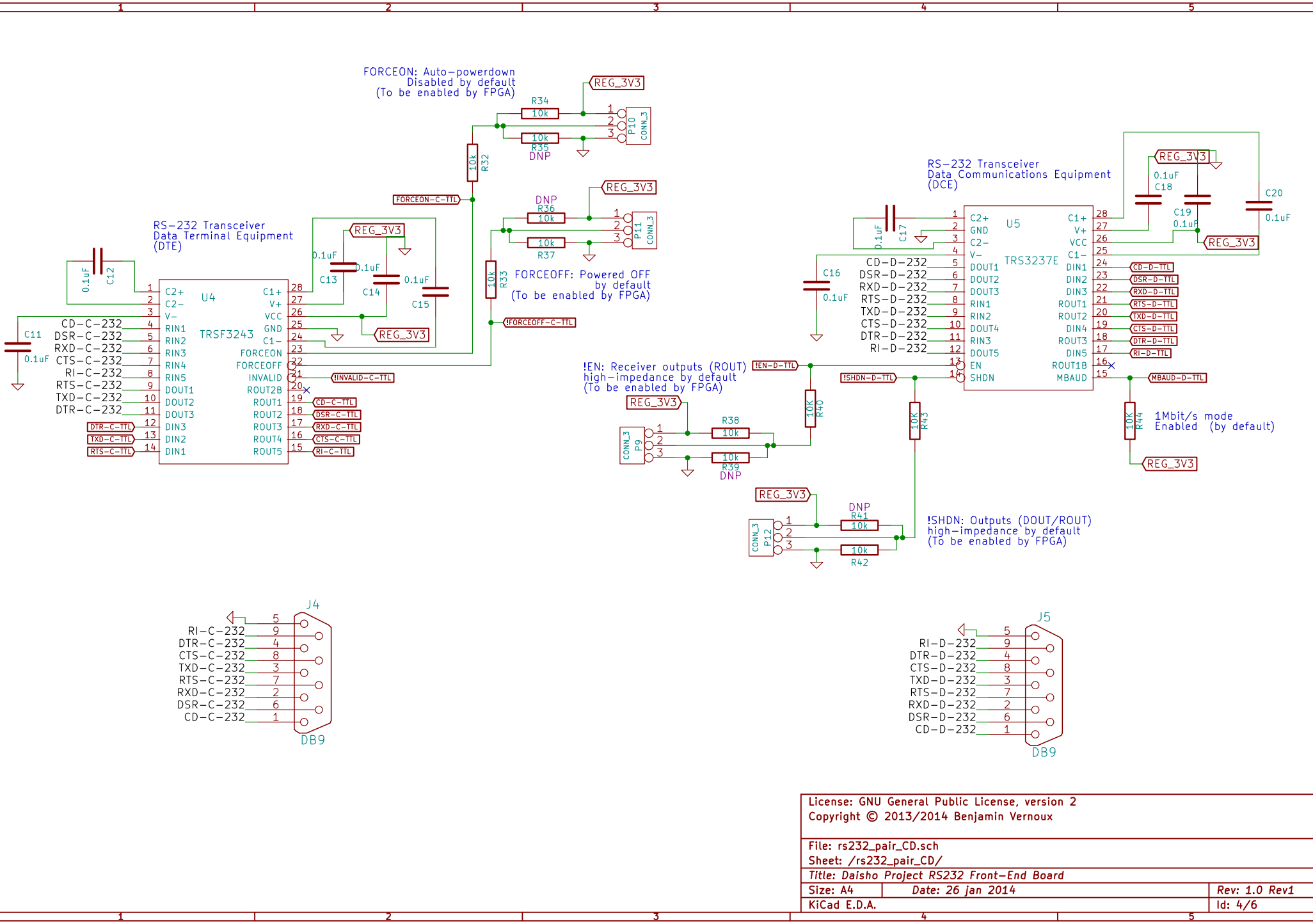
Title: Daisho Project RS232 Front-End Board		
Size: A4	*Date: 26 jan 2014*	*Rev: 1.0 Rev1*
KiCad E.D.A.		Id: 3/6



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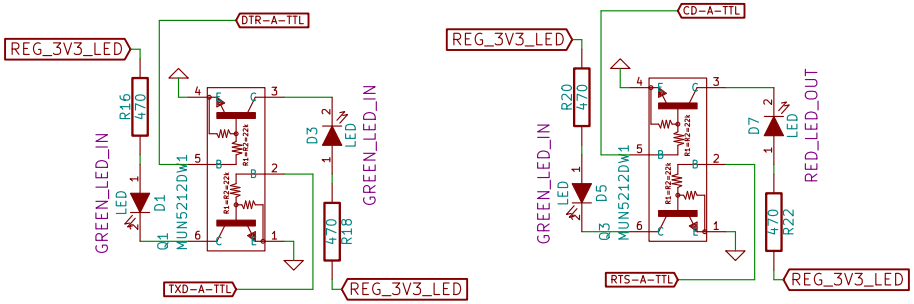
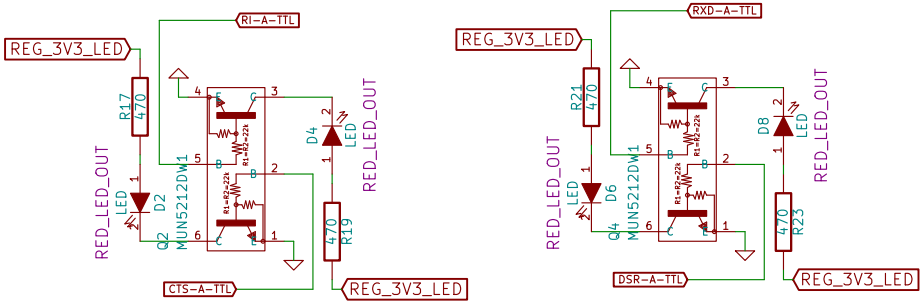
File: rs232_pair_CD.sch
Sheet: /rs232_pair_CD/
Title: Daisho Project RS232 Front-End Board

Size: A4	*Date: 26 jan 2014*	*Rev: 1.0 Rev1*
KiCad E.D.A.		Id: 4/6

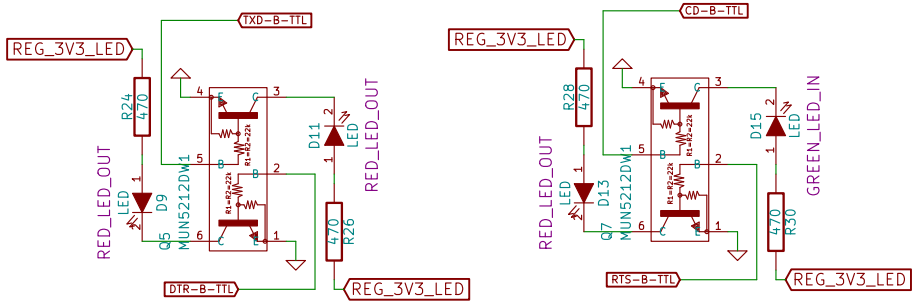
Note: All LEDs are managed by REG_3V3_LED

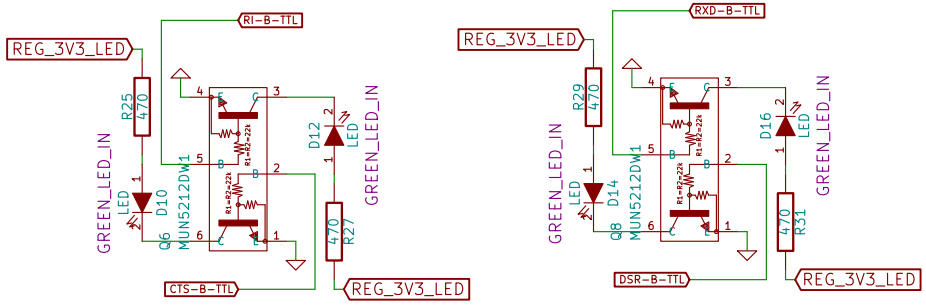
RS-232 Transceiver
Data Terminal Equipment
(DTE) (TRSF3243)

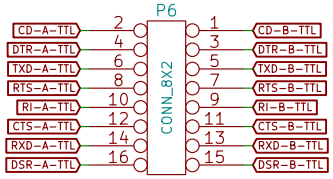




RS-232 Transceiver
Data Communications Equipment
(DCE) (TRS3237E)







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File: rs232_pair_AB_LED.sch		
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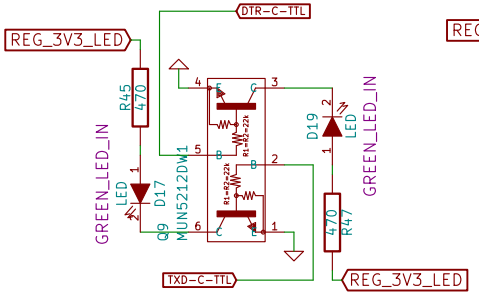
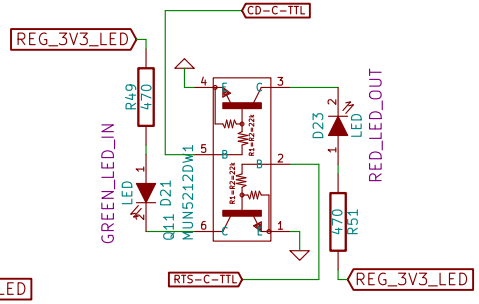
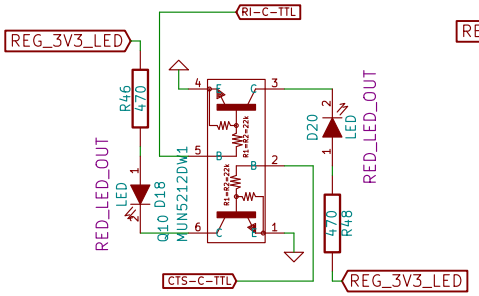
Title: Daisho Project RS232 Front-End Board		
Size: A4	*Date: 26 jan 2014*	*Rev: 1.0 Rev1*
KiCad E.D.A.		Id: 5/6

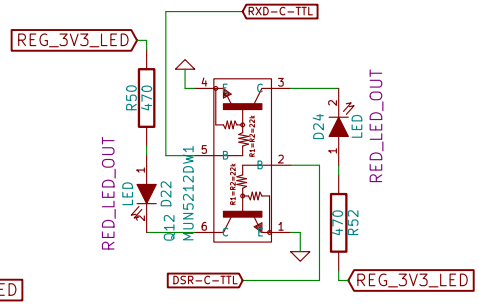
Note: All LEDs are managed by REG_3V3_LED

RS-232 Transceiver
Data Terminal Equipment
(DTE) (TRSF3243)

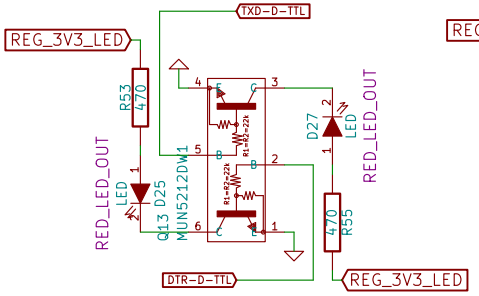


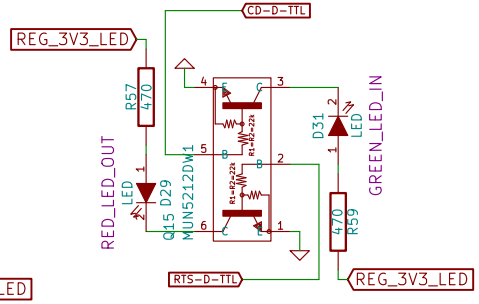


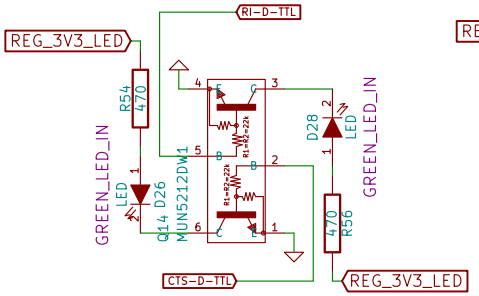


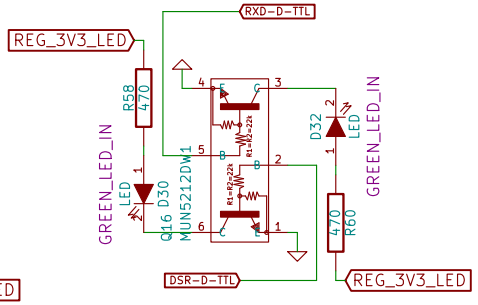


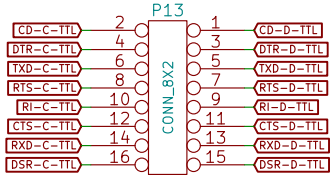
RS-232 Transceiver
Data Communications Equipment
(DCE) (TRS3237E)











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File: rs232_pair_CD_LED.sch		
Sheet: /rs232_pair_CD_LED/		
Title: Daisho Project RS232 Front-End Board		
Size: A4	*Date: 26 jan 2014*	*Rev: 1.0 Rev1*
KiCad E.D.A.		Id: 6/6