

FIDU1
Fiducial
Mark
FIDUCIAL

FIDU2
Fiducial
Mark
FIDUCIAL

Fpga2
Fpga2.Sch

- SQ2A[0..18] DIN
- SQ2OE* TxFaultB
- SQ2WE* RxLOS
- SQ2CSA* RXLOLB
- SQ2CSB* RXLOSB
- SQ2D[0..7] BREFCLK2P
- IO[0..31] BREFCLK2N
- IOLE TxFault
- IOCLKAB RxLOS
- IODIR[0..3] RxSD
- nIOOE DLY[0..10]
- IOCLKBA LENDTX
- nINIT LENRFOUT
- MOD_DEF[0..2]RXRECCLK
- TxDisableB LENRECCLK
- RXSCKB DTXFB
- RXSDAB DRFB
- MOD_DEF[0..2] RXRECFB
- TxDisable RXRECP
- BREFCLKP RXRECN
- BREFCLKN CGCS
- CGLOCK CGDI
- CGSK CGSK

HotSwap
HotSwap.Sch

- LI*
- nRESET

Memory
Memory.Sch

- SQ2A[0..18]
- SQ1A[0..18]
- SQ1WE*
- SQ1OE*
- SQ2OE*
- SQ2WE*
- SQ2CSA*
- SQ2CSB*
- SQ1CSB*
- SQ1CSA*
- SQ1D[0..7]
- SQ2D[0..7]
- DRD[0..31]
- DRA[0..12]
- DRCKE
- DRCLK
- DQM[0..3]
- DRCS*
- DRRAS*
- DRCAS*
- DRWE*
- DRBA0
- DRBA1

Fpga1
Fpga1.Sch

- LCLK PCIBR#
- PCIBB# PCIDACK0#
- PCIBDP# PCIDACK1#
- PCIBG# PCUSERo
- PCIB# PCILINTo#
- PCIWAIT# PCIRETRY#
- PCIBURST# ETHIRQ
- PCICCS# LI*
- PCIDP[0..3] vmeAS1*
- PCIDREQ# vmeLWORDI*
- PCIDREQ1# vmeDTACKI*
- PCILINT# vmeWRITEI*
- PCILRESET# vmeDS1*0
- PCIMDREQ# vmeDS1*1
- PCIMEREQ# vmeBGOUT*[0..3]
- PCUSERI vmeBCLRI*
- PCIRDWR# vmeBBSYI*
- PCITAF# vmeACFAIL*
- PCITEA# vmeACKIN*
- PCITSZ# vmeRQ*[1..7]
- PCITSZ1# vmeBRI*[0..3]
- PCITS# vmeBERRI*
- LA[0..31] vmeSYSFAIL*
- LD[0..31] nGA[0..5]
- WE# vmeRETRYI*
- ETH# nEVGIF
- BE0# nEVRI*
- BE1# nIFHANDLE
- BE2# nURD
- BE3# nUWR
- RE# nUCS
- ULE
- VMEMSTR
- vmeASO* UA[0..16]
- vmeWRITEO*
- vmeDTACKO*
- vmeLWORDO*
- DTACKEN
- ADIR
- nAOE
- ACLKAB
- ACLKBA
- ALE
- vmeAM[0..5]
- vmeDSO*0
- vmeDSO*1
- nAMOE
- AMDIR
- AMCLKAB
- AMLE
- AMCLKBA
- vmeACK*
- nDCHENA
- vmeBGIN*[0..3]
- nDOE
- DDIR
- DCLKAB
- DLE
- DCLKBA
- vmeBBSYEN
- vmeBCLREN
- vmeBCLRO*
- vmeLACKOUT*
- nSYSCON
- vmeSYSFAILO*
- vmeBERRO*
- SYSRESETO*
- vmeBRO*[0..3]
- vmeRRO*[1..7]
- SQ2A[0..18]
- SQ1A[0..18]
- SQ1WE*
- SQ1OE*
- SQ2OE*
- SQ2WE*
- SQ2CSA*
- SQ2CSB*
- SQ1CSB*
- SQ1CSA*
- SQ1D[0..7]
- SQ2D[0..7]
- RETRYEN
- vmeRETRYO*
- PWRONIF
- nUIRQ
- UD[0..7]

PanelIO
PanelIO.Sch

Power
Power.Sch

MGT
MGT.Sch

- RXD1P TXD2P
- RXD1N TXD2N
- RXD2N RFRECLKN
- RXD2P RFRECLKP

virtexconf
virtexconf.Sch

- nINIT nURD
- nUIRQ nUWR
- TDO_PCI DIN
- UD[0..7] TDI_PCI
- nRESET TCK
- TMS
- nTRST
- nUCS
- ULE
- UA[0..16]
- vmeSYSRESETO*
- SYSRESETO*
- nURESET

VMEMP1
VMEMP1.Sch

- VMEMSTR LI*
- vmeASO* vmeAS1*
- vmeWRITEO* vmeLWORDI*
- vmeDTACKO* vmeDTACKI*
- vmeLWORDO* vmeWRITEI*
- DTACKEN vmeDS1*0
- LA[0..31] vmeDS1*1
- ADIR vmeBGOUT*[0..3]
- nAOE vmeBCLRI*
- ACLKAB vmeBBSYI*
- ACLKBA vmeACFAIL*
- ALE vmeACKIN*
- vmeAM[0..5] vmeRQ*[1..7]
- vmeDSO*0 vmeBRI*[0..3]
- vmeDSO*1 vmeSYSRESETI*
- nAMOE vmeBERRI*
- AMDIR vmeSYSFAIL*
- AMCLKAB nGA[0..5]
- AMLE
- AMCLKBA
- vmeACK*
- nDCHENA
- vmeBGIN*[0..3]
- LD[0..31]
- nDOE
- DDIR
- DCLKAB
- DLE
- DCLKBA
- vmeBBSYEN
- vmeBCLREN
- vmeBCLRO*
- vmeLACKOUT*
- nSYSCON
- vmeSYSFAILO*
- vmeBERRO*
- SYSRESETO*
- vmeBRO*[0..3]
- vmeRRO*[1..7]

VMEMP2
VMEMP2.Sch

- RETRYEN vmeRETRYI*
- vmeRETRYO* nEVGIF
- LA[0..31] nEVRI*
- ADIR nIFHANDLE
- nAOE nPEVGI*
- ACLKAB nPEVRI*
- ACLKBA nPIFHANDLE
- ALE
- LD[0..31]
- nDOE
- DDIR
- DCLKAB
- DLE
- DCLKBA
- PMCI[0..31]
- IO[0..31]
- IOLE
- IOCLKAB
- IODIR[0..3]
- nIOOE
- IOCLKBA
- PWRONIF

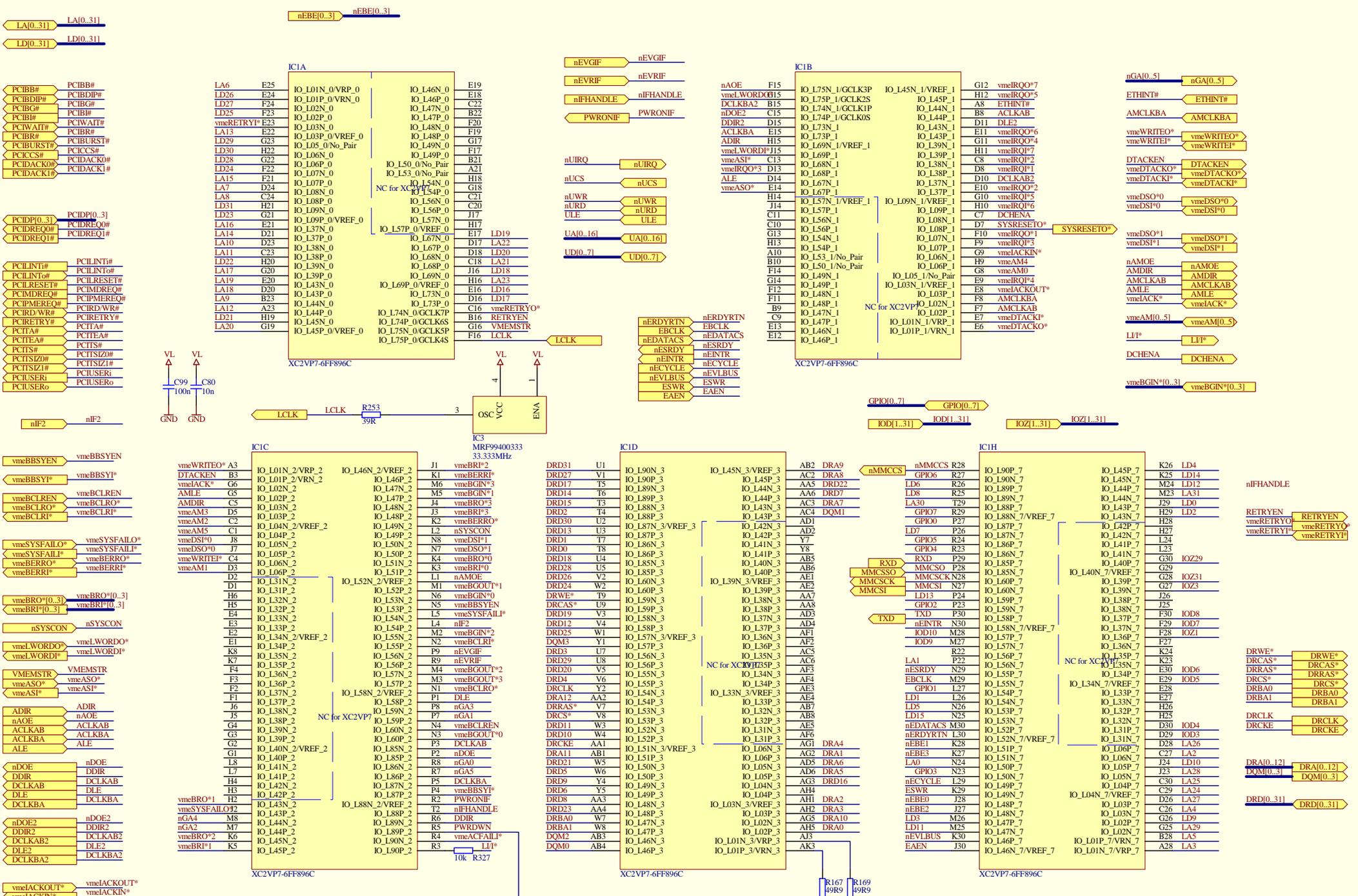
Transceivers
Transceivers.Sch

- MOD_DEF[0..2] TxDisable
- TxFault TXD1N
- RxLOS TXD1P
- RXD1P TXD2P
- RXD1N TXD2N
- RXD2N TXD3P
- RXD2P TXD3N

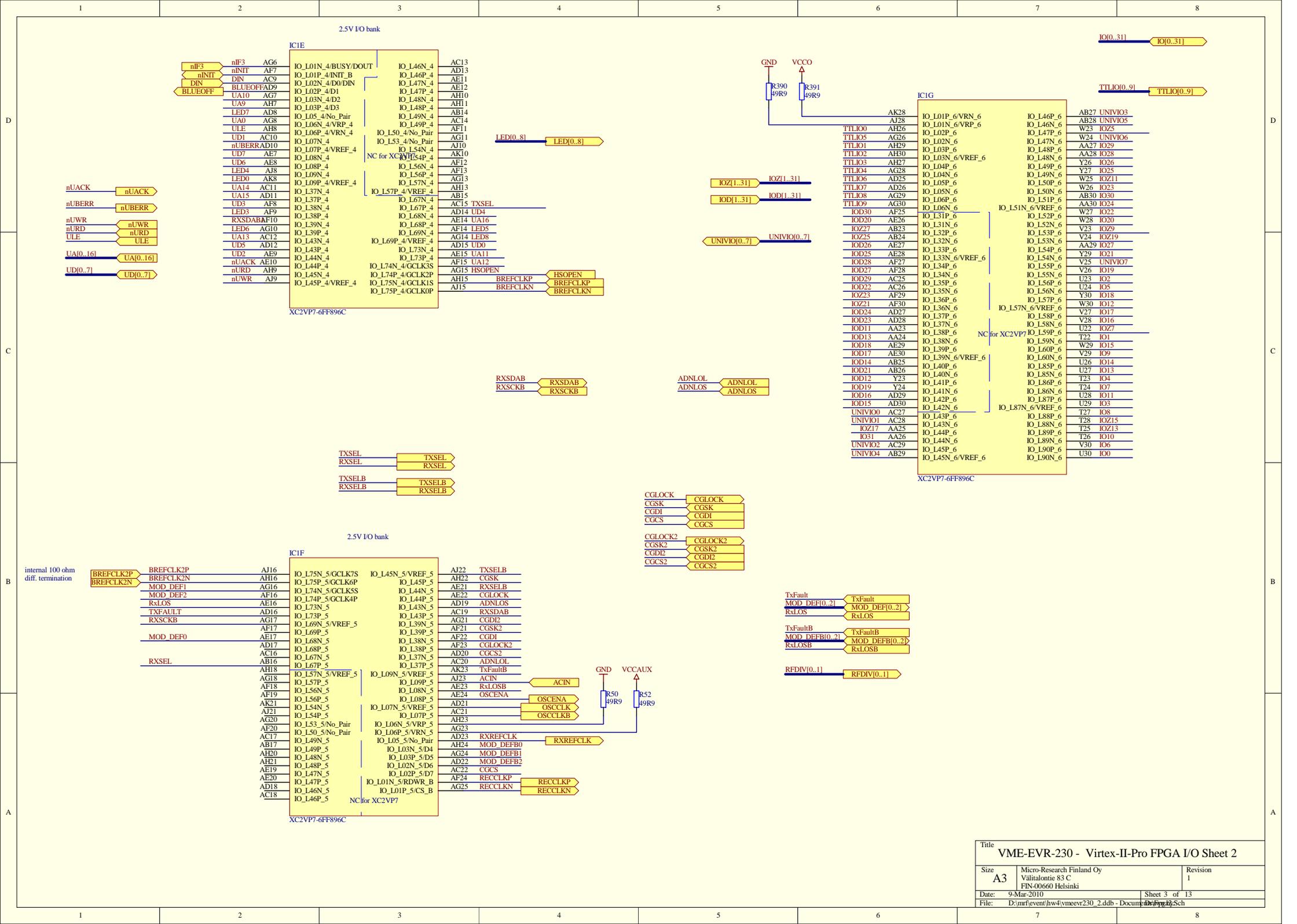
Ethernet
Ethernet.Sch

- ETHCLK ETHINT#
- GNT1# REQ1#
- C/BE0# RST#
- C/BE1#
- C/BE2#
- C/BE3#
- DEVSEL#
- FRAME#
- IRDY#
- PAR
- PERR#
- SERR#
- STOP#
- TRDY#
- AD[10..31]
- AD[0..9]

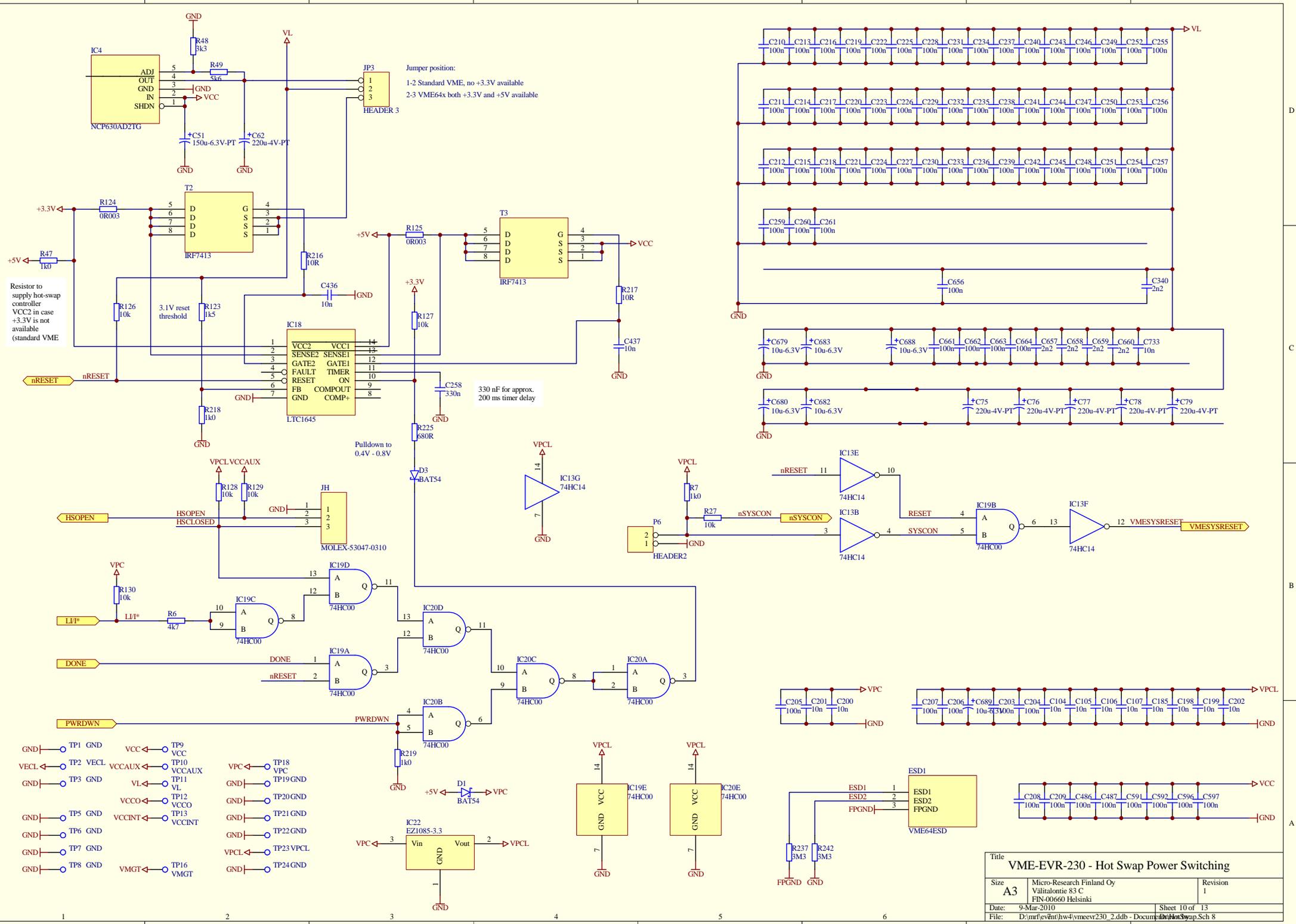
Title VME-EVR-230 Event Receiver		
Size A3	Micro-Research Finland Oy Valittontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 1 of 13	
File: D:\mr\event\hw4\vmeevr230_2.ddb - Document: VME-EVR23082.Sch		



Title VME-EVR-230 - FPGA I/O sheet 1		
Size A3	Micro-Research Finland Oy Valittontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 2 of 13	
File: D:\mrf\evnt\hw4\vmeevr230_2.ddb - Document	Sch 8	



Title VME-EVR-230 - Virtex-II-Pro FPGA I/O Sheet 2		
Size A3	Micro-Research Finland Oy Valittontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 3 of 13	
File: D:\mr\event\hw4\vmeevr230_2.ddb - Document	Drawing: 4.5ch	



Jumper position:
 1-2 Standard VME, no +3.3V available
 2-3 VME64x both +3.3V and +5V available

Resistor to supply hot-swap controller VCC2 in case +3.3V is not available (standard VME)

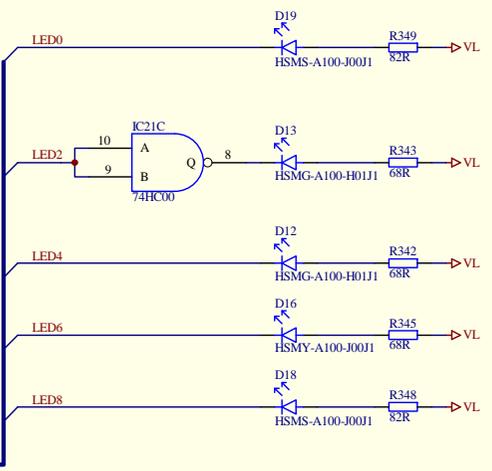
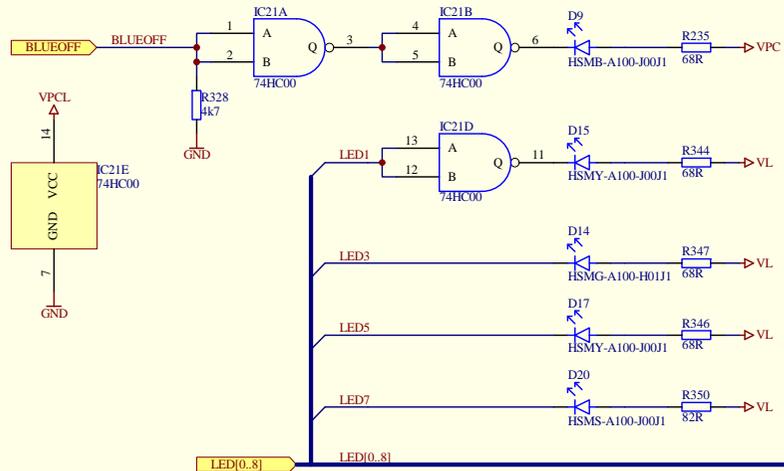
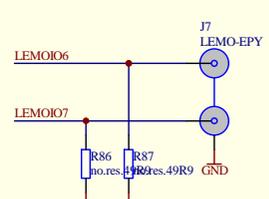
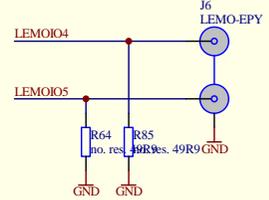
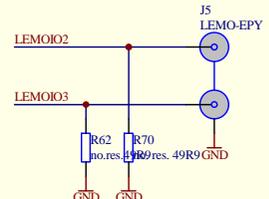
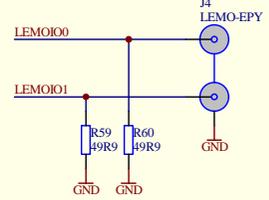
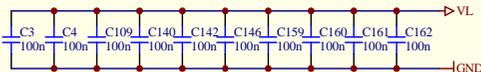
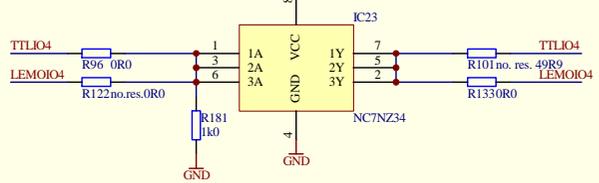
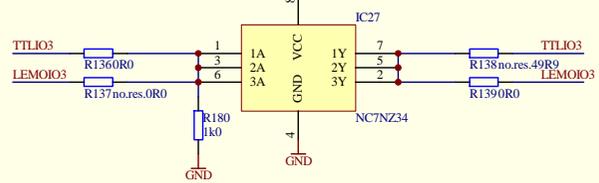
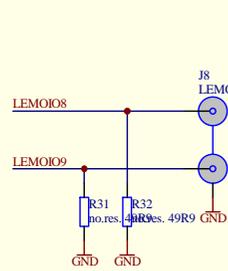
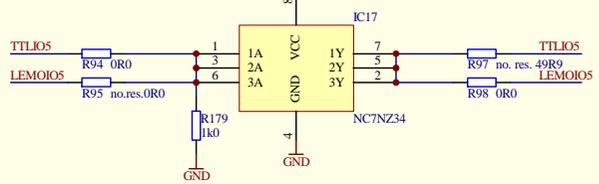
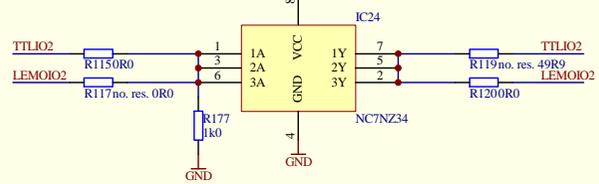
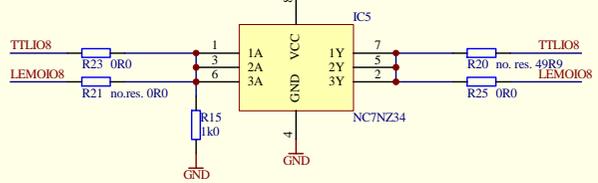
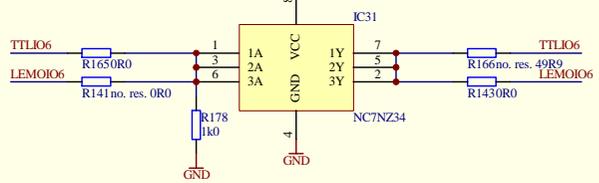
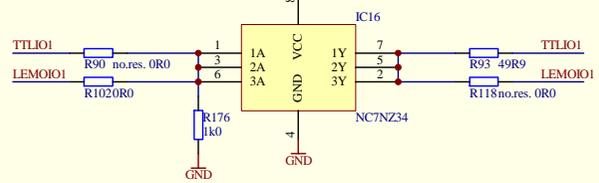
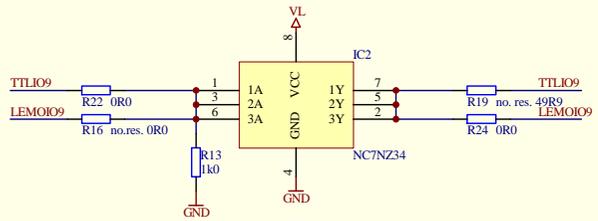
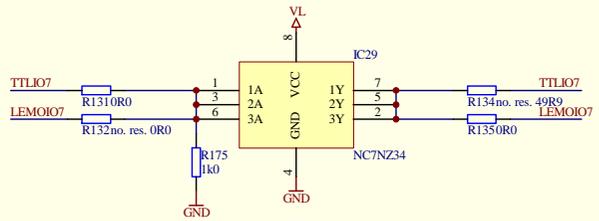
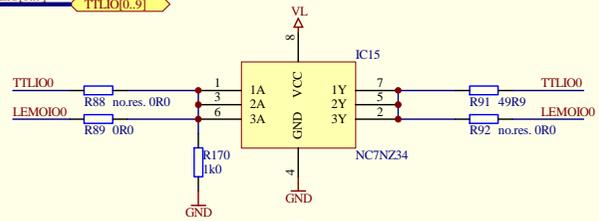
330 nF for approx. 200 ms timer delay

Pulldown to 0.4V - 0.8V

- GND TP1 GND
- VECL TP2 VECL
- GND TP3 GND
- GND TP5 GND
- GND TP6 GND
- GND TP7 GND
- GND TP8 GND
- VCC TP9 VCC
- VCCAUX TP10 VCCAUX
- VL TP11 VL
- VCCO TP12 VCCO
- VCCINT TP13 VCCINT
- VPGND TP14 VPGND
- VMGT TP16 VMGT
- VPC TP18 VPC
- GND TP19 GND
- GND TP20 GND
- GND TP21 GND
- GND TP22 GND
- VPCL TP23 VPCL
- GND TP24 GND

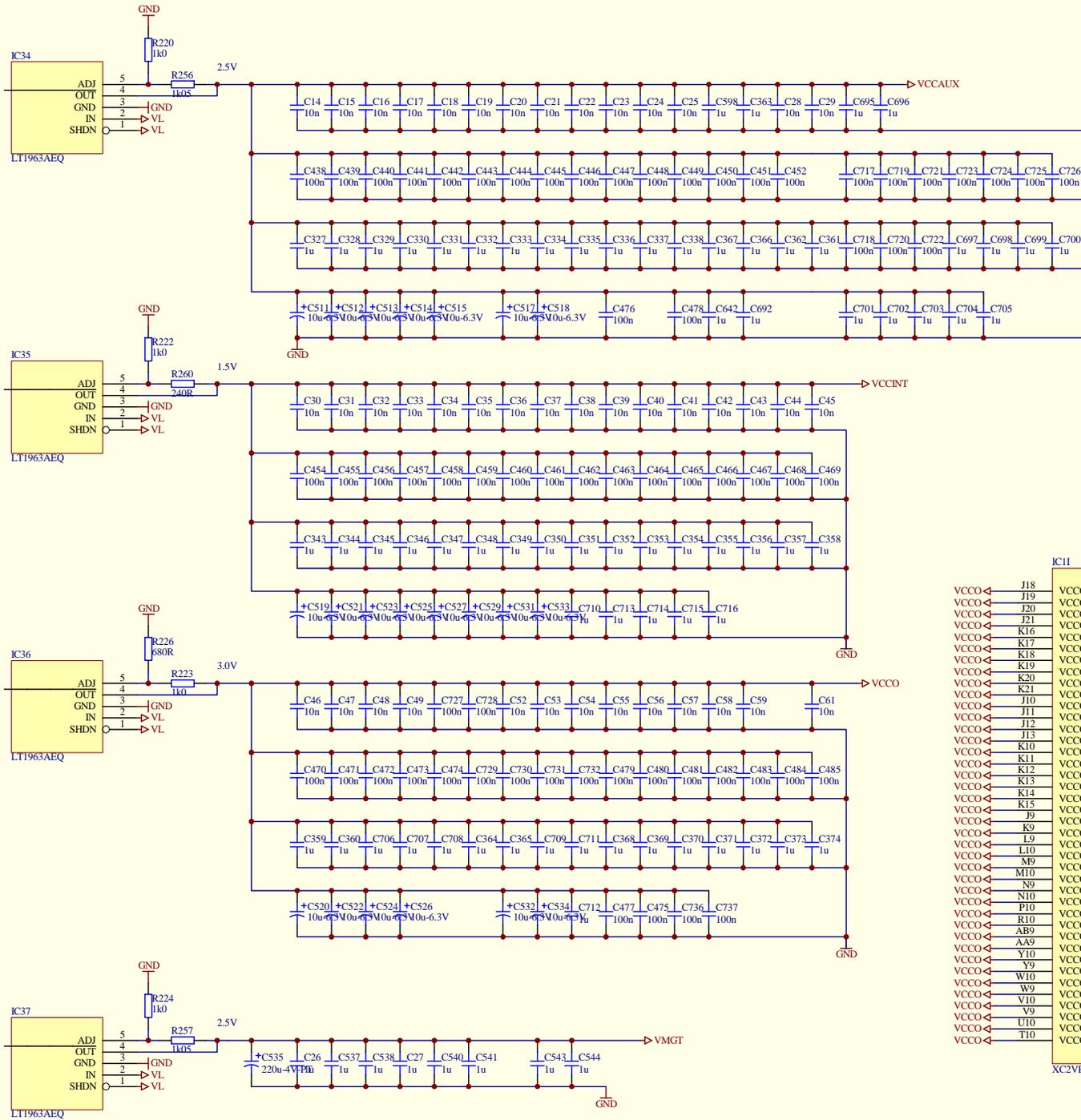
Title VME-EVR-230 - Hot Swap Power Switching		
Size A3	Micro-Research Finland Oy Valittontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 10 of 13	
File: D:\mrfev\hw4\vmeevr230_2.ddb - Document	Hot Swap.Sch 8	

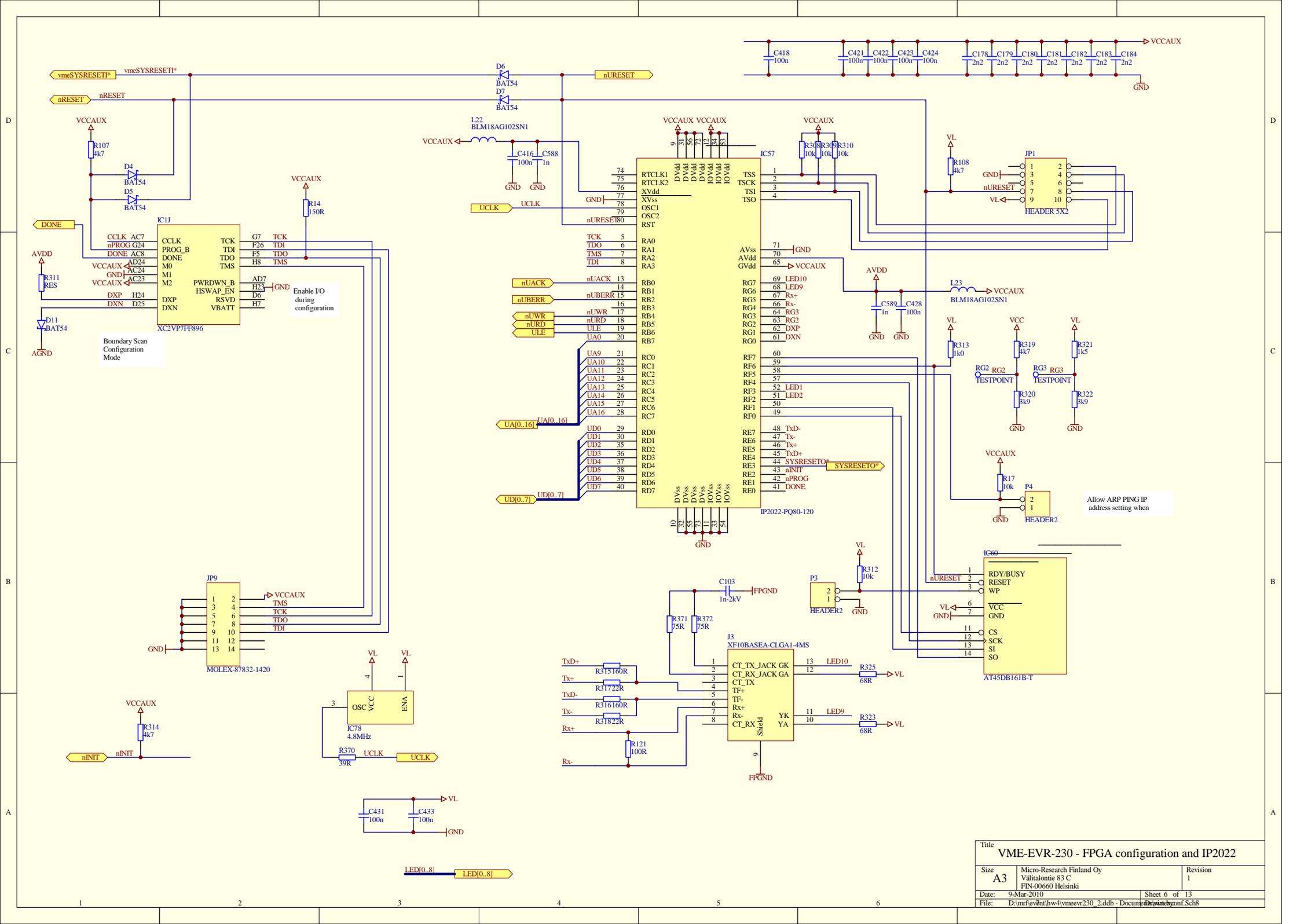
TTLIO[0..9]



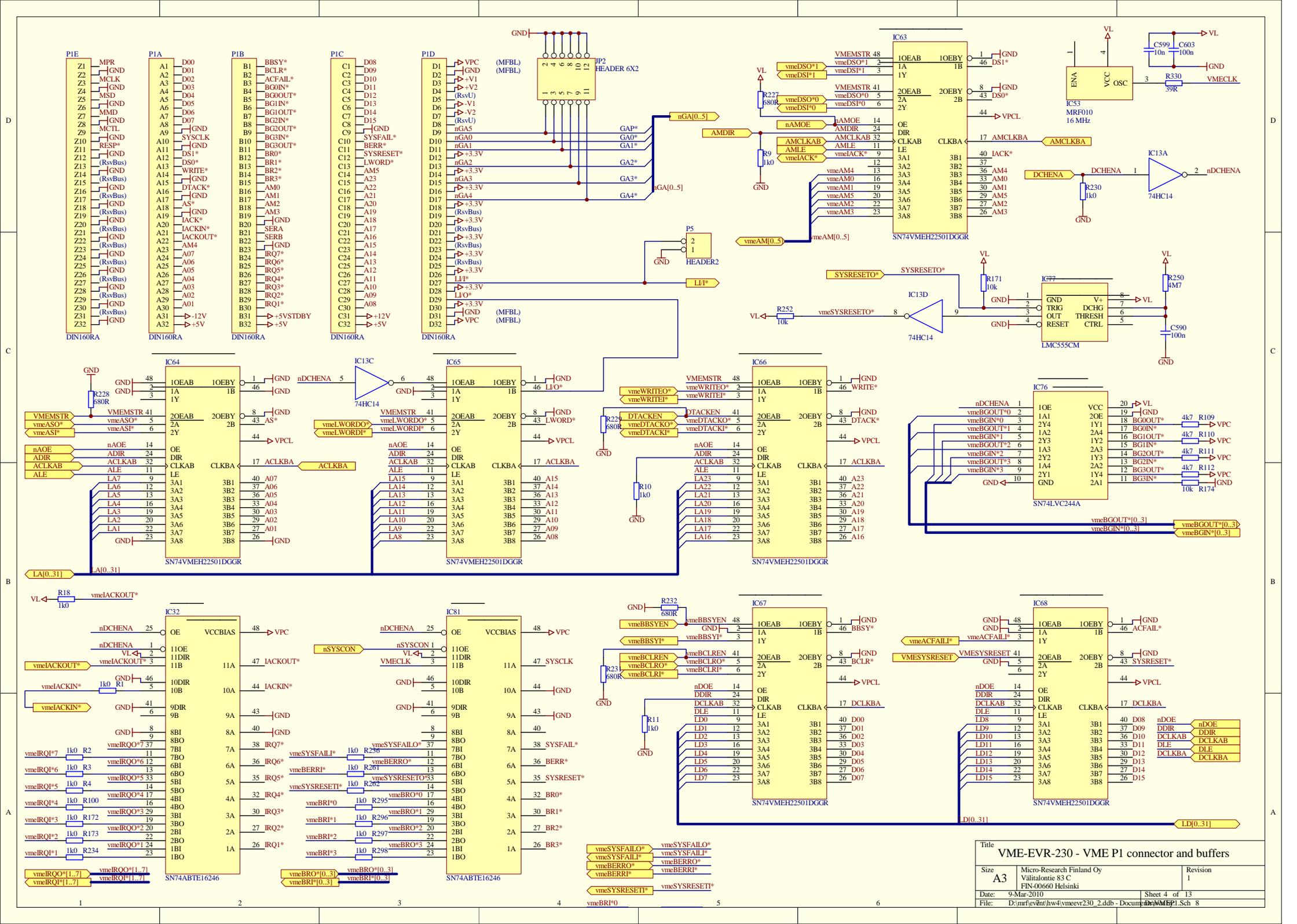
- LP1 LPIPE-1270.1010
- LP2 LPIPE-1270.1010
- LP3 LPIPE-1270.1010
- LP4 LPIPE-1270.1010
- LP5 LPIPE-1270.1010

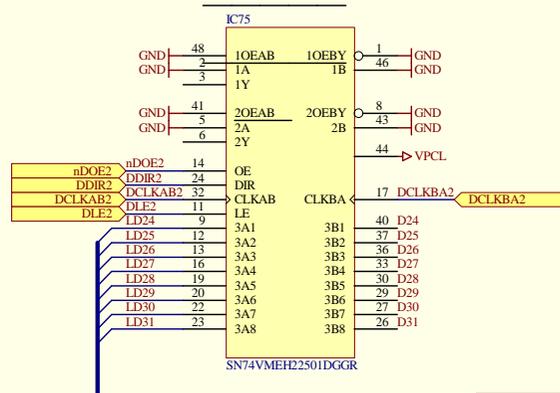
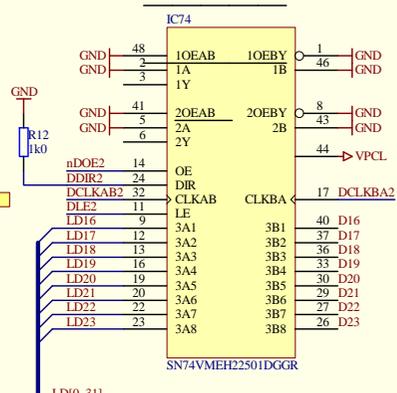
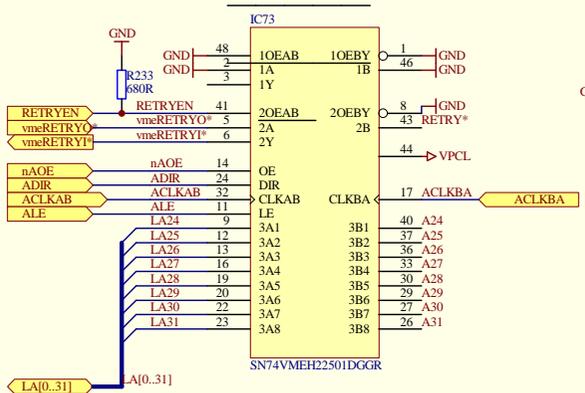
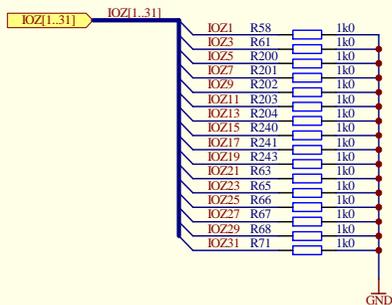
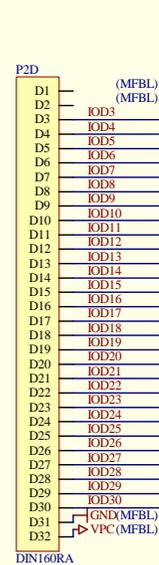
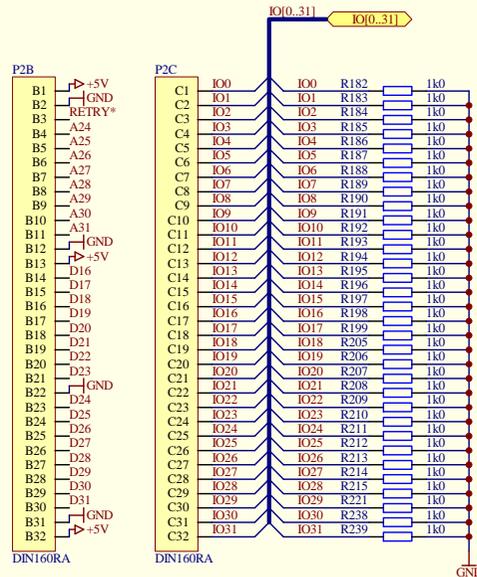
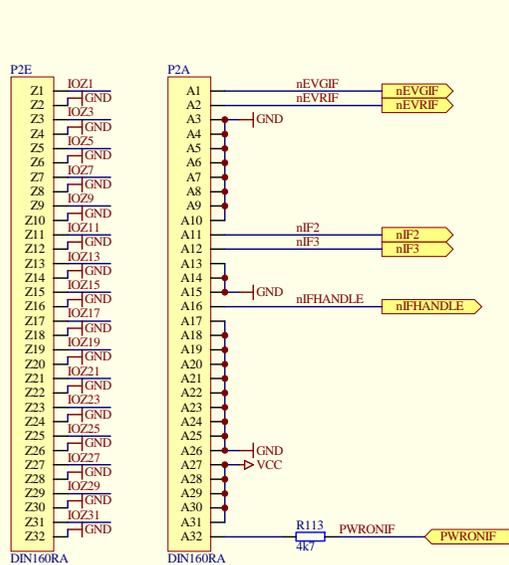
Title VME-EVR-230 - Front Panel I/O and Leds		
Size A3	Micro-Research Finland Oy Valittontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 9 of 13	
File: D:\mrf\ent\hw4\vmeevr230_2.ddb - Docu	Drawn by J.O.Sch 8	





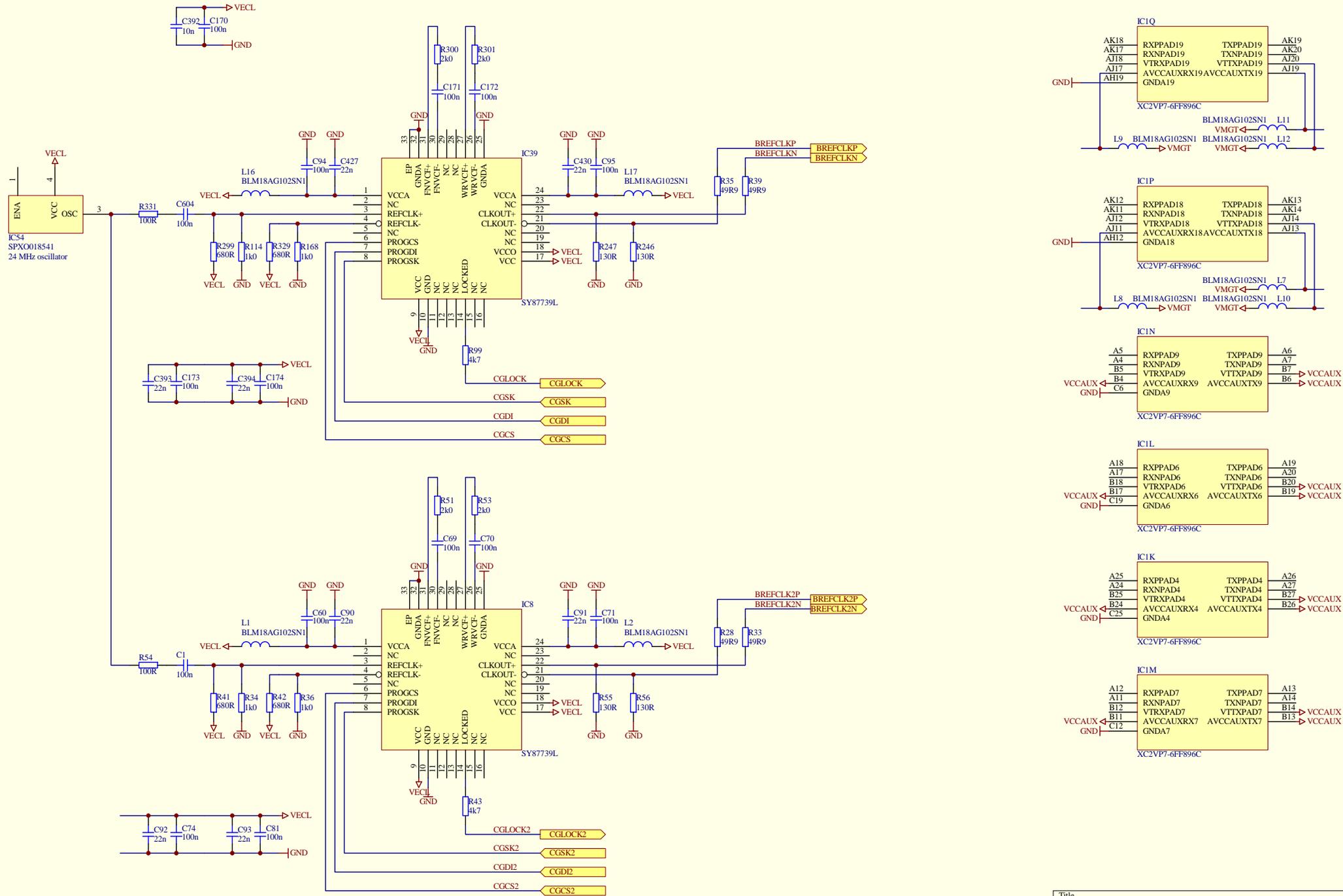
Title VME-EVR-230 - FPGA configuration and IP2022		
Size A3	Micro-Research Finland Oy Valitalontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 6 of 13	
File: D:\mr\evnt\hw4\vmeevr230_2.ddb - Docu	Docu\conf\Sch8	



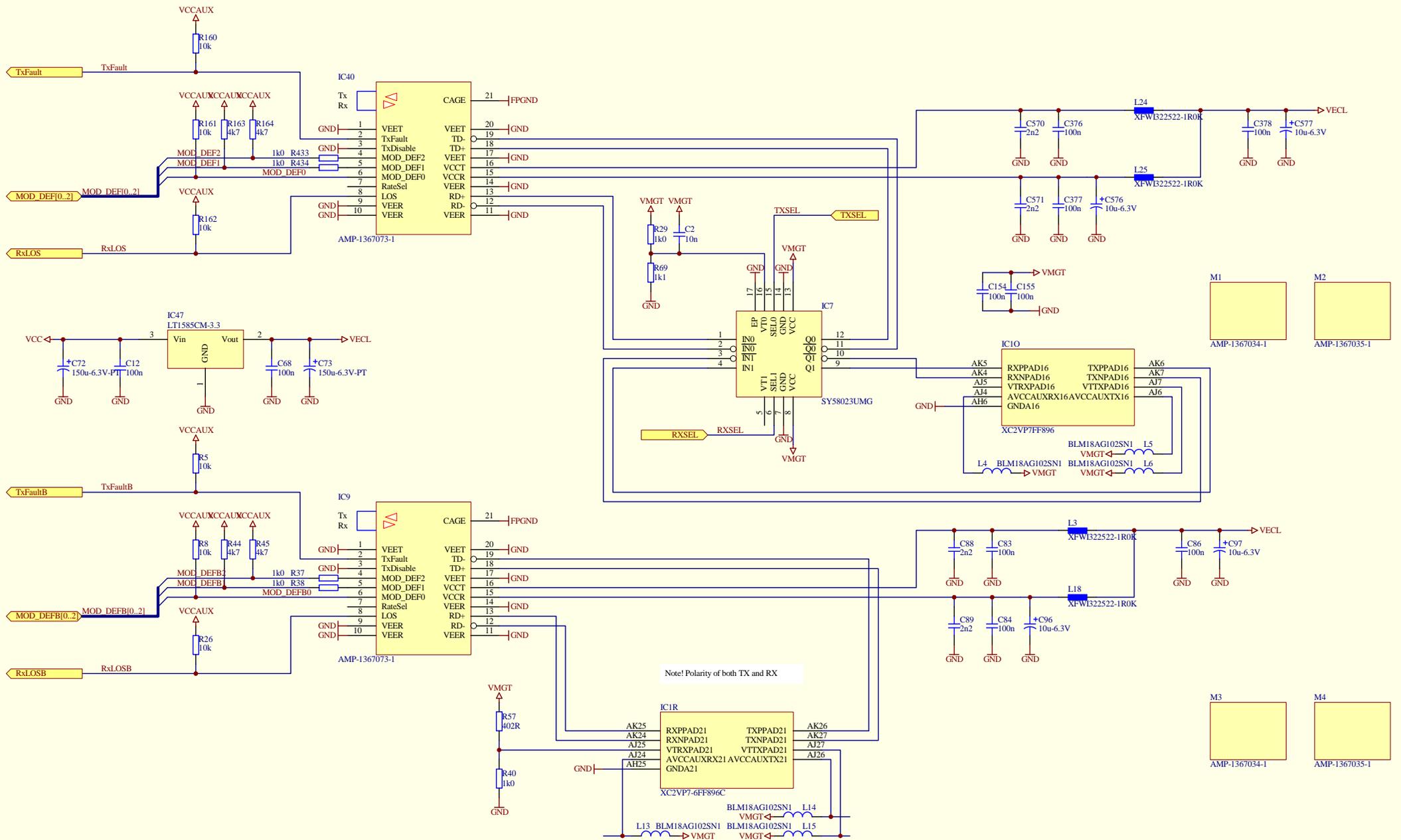


Title
VME-EVR-230 - VME P2 connector and buffers

Size A3	Micro-Research Finland Oy Valittontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 5 of 13	
File: D:\mrf\event\hw4\vmeevr230_2.ddb - Document	Drawn by: P2.Sch 8	

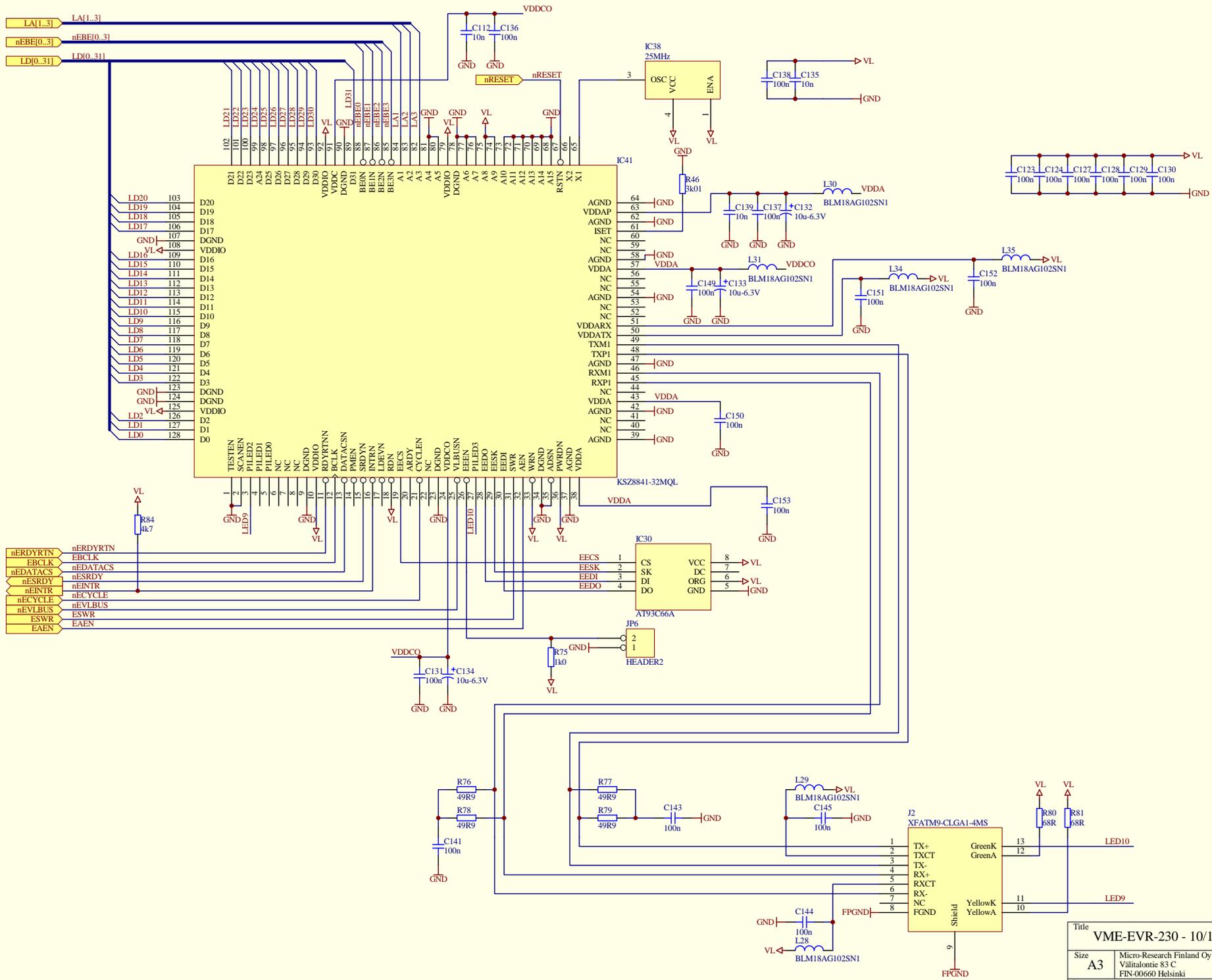


Title VME-EVR-230 - MGTs		
Size A3	Micro-Research Finland Oy Valitalontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 13 of 13	
File: D:\mrf\event\hw4\vmeevr230_2.ddb - Docu	11.06.10 MSch	



Note! Polarity of both TX and RX

Title VME-EVR-230 - Transceivers		
Size A3	Micro-Research Finland Oy Valitalontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 12 of 13	
File: D:\mr\event\hw4\vmeevr230_2.ddb - Document	Drawn by: Transceivers.Sch	



Title VME-EVR-230 - 10/100 MAC & PHY		
Size A3	Micro-Research Finland Oy Valittontie 83 C FIN-00660 Helsinki	Revision 1
Date: 9-Mar-2010	Sheet 7 of 13	
File: D:\mr\evnt\hw4\vmeevr230_2.ddb - Docu	Printed: 11/11/2010 10:58:58 AM	