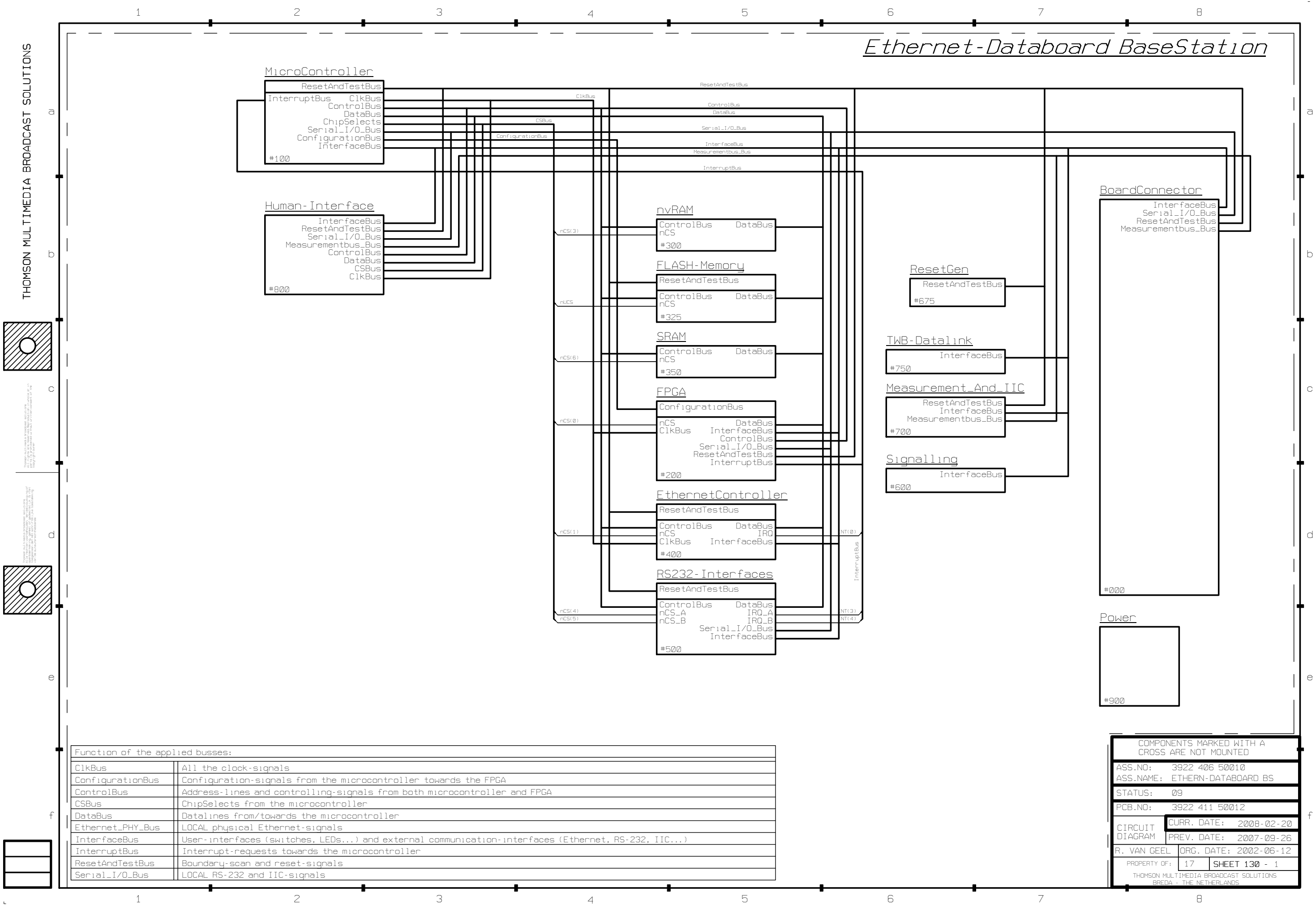
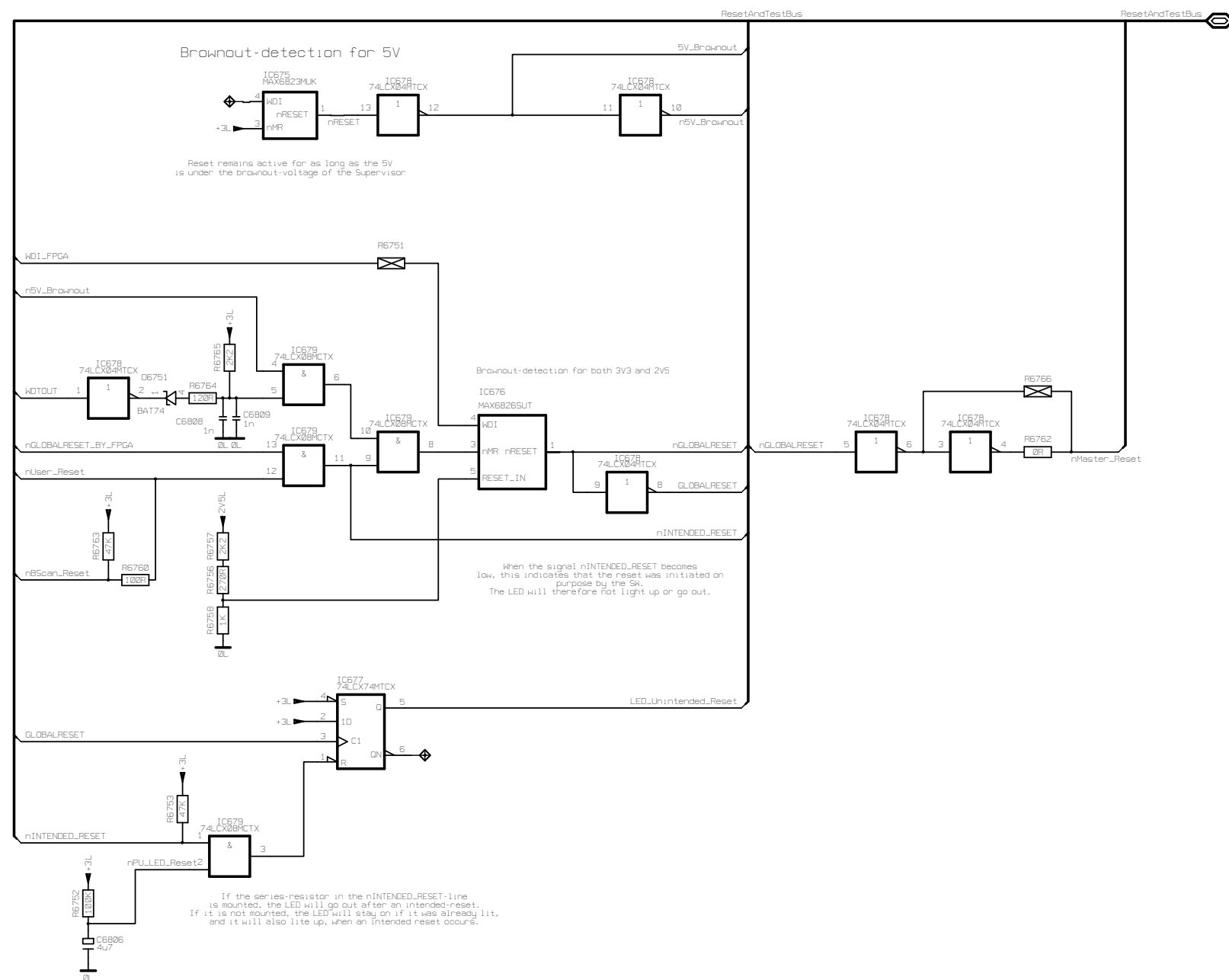
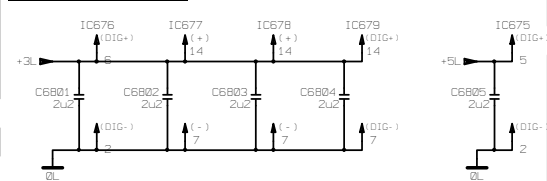


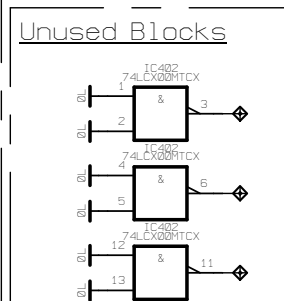
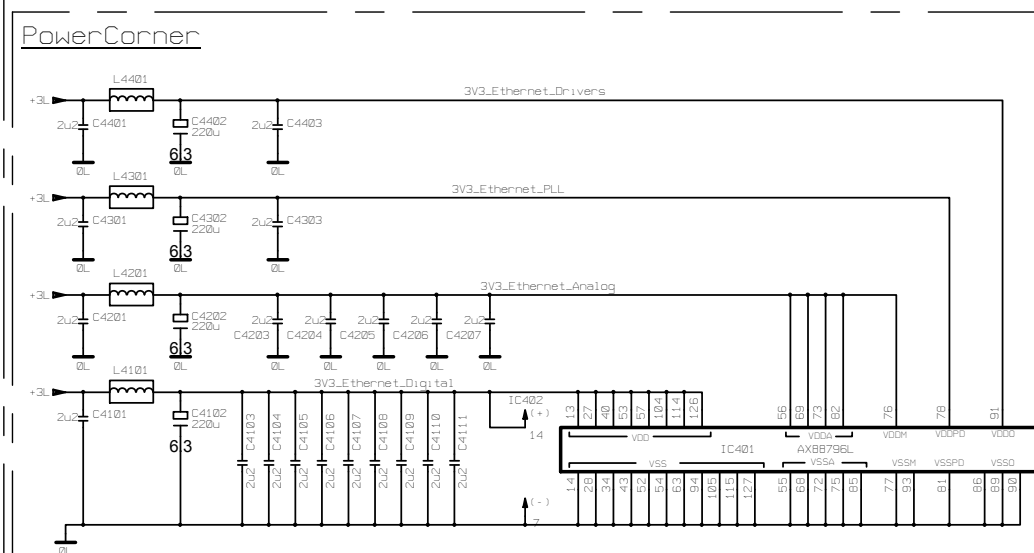
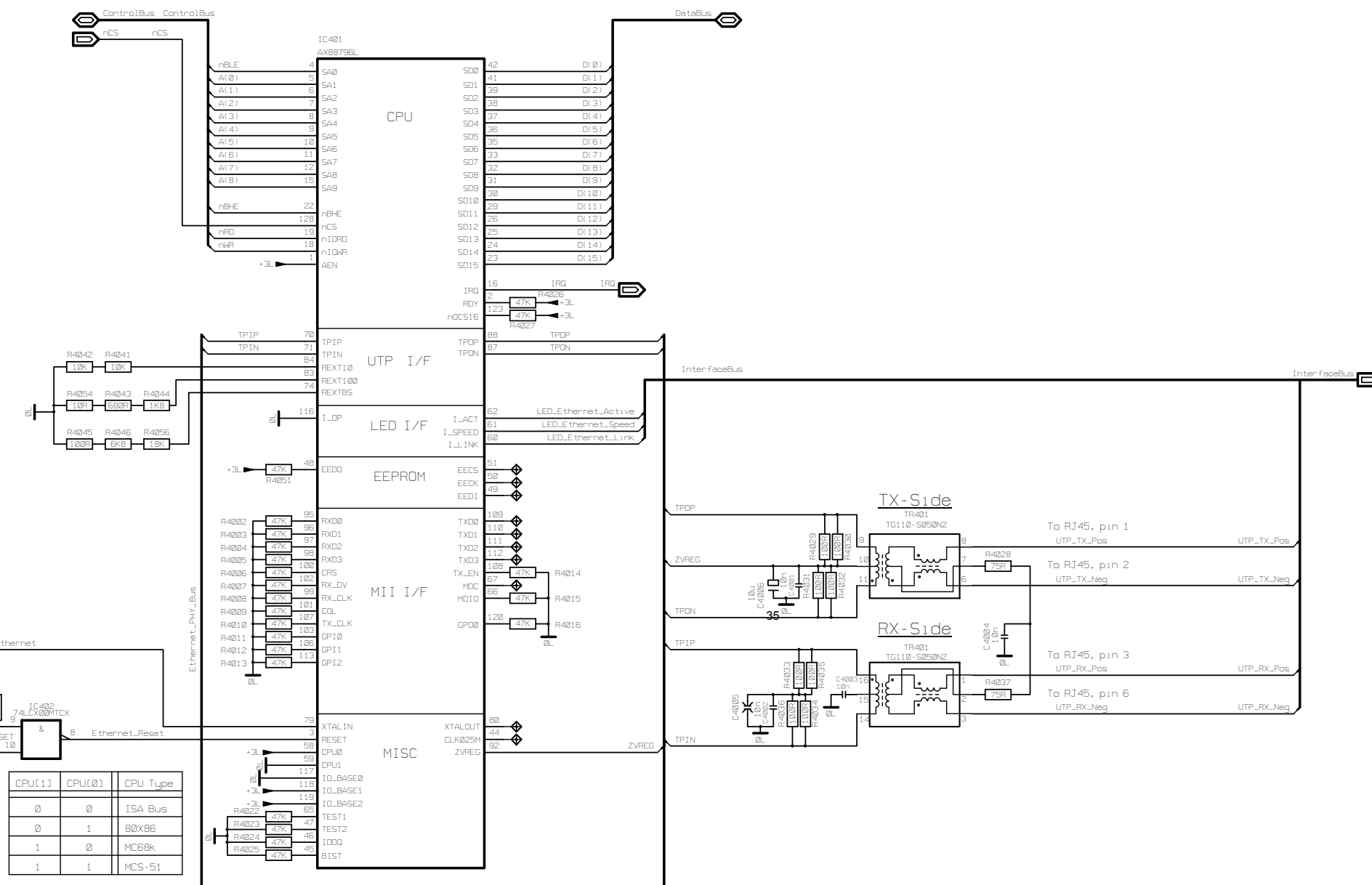


PowerCorner



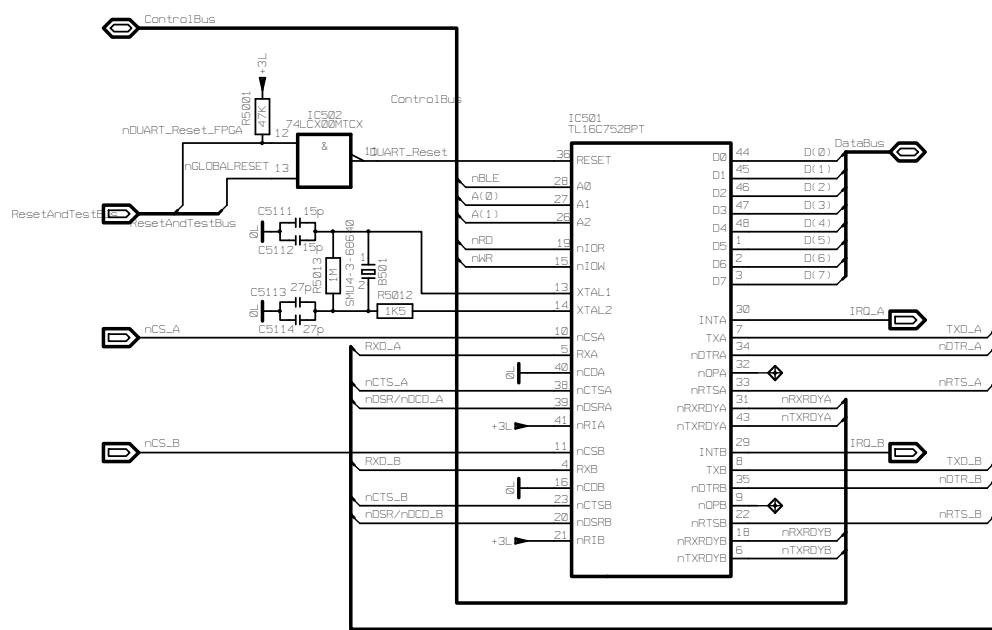
COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED		
ASS.NO:	3922 406 50010	
ASS.NAME:	ETHERN-DATABOARD BS	
STATUS:	09	
PCB.NO:	3922 411 50012	
CURRENT CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20	
	PREV. DATE: 2007-09-26	
R. VAN GEEL	ORG. DATE: 2002-06-12	
PROPERTY OF:	17	SHEET 130 - 2
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BRFGA - THE NETHERLANDS		

PowerCorner



COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED		
ASS.NO:	3922 406 50010	
ASS.NAME:	ETHERN-DATABOARD BS	
STATUS:	09	
PCB.NO:	3922 411 50012	
CIRCUIT DIAGRAM	CURR. DATE:	2008-02-2
	PREV. DATE:	2007-09-2
R. VAN GEEL	ORG. DATE:	2002-06-1
PROPERTY OF:	17	SHEET 130 - 3
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS		

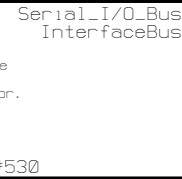
#500 RS-232 Interface



Ports A and B are RS232/422 ports, that are controlled by the external DUART. In that mode, the so-called '5k-handshake' is used. That's why the other signals are weakly pulled towards a defined state.

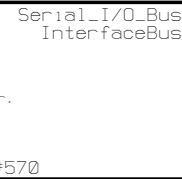
It is possible to switch to a mode where only RXD and TXD are used without additional handshake signals. They are both available on a SubD9-connector.

RS232-Port-A-and-B



Maximum speed 115k2

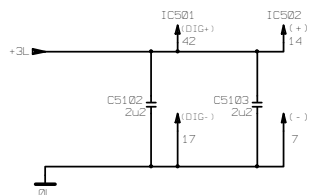
RS232-Port-0-and-1



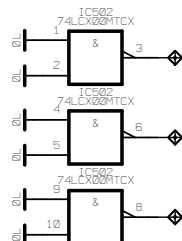
Maximum speed 38k4

Sig.	Full Name	DUART	External
RXD	Receive Data	←	
TXD	Transmit Data	→	
CTS	Clear To Send	←	
RTS	Request To Send	→	
DSR	Data Set Ready	←	
DTR	Data Terminal Ready	→	
DCD	Data Carrier Detect	←	

PowerCorner

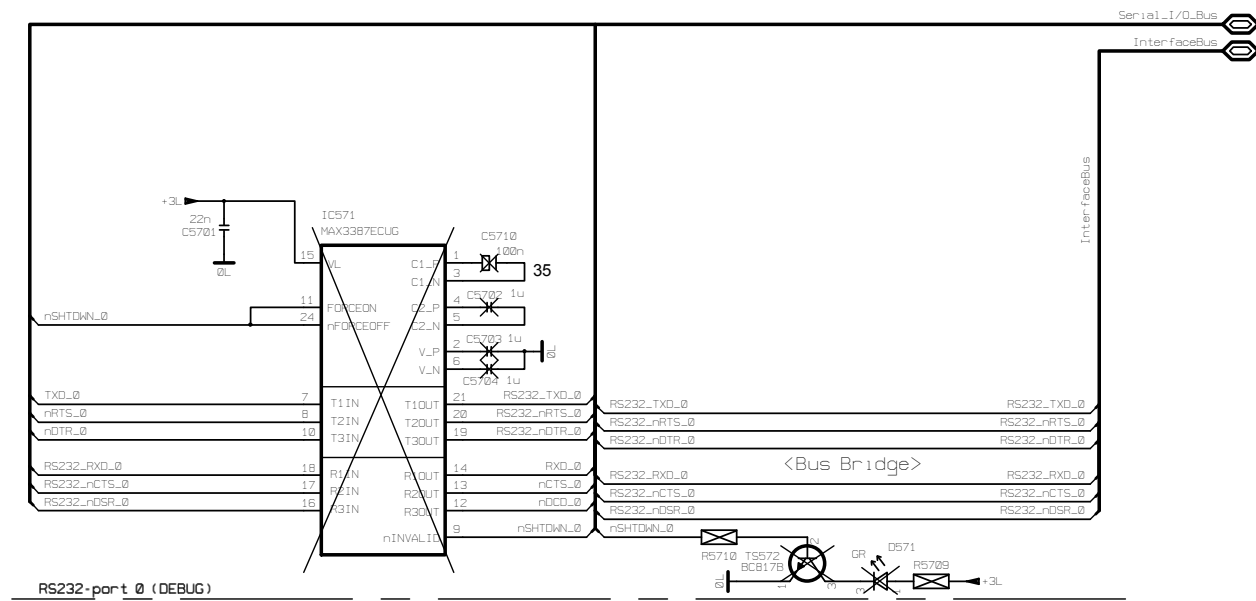


Unused Blocks

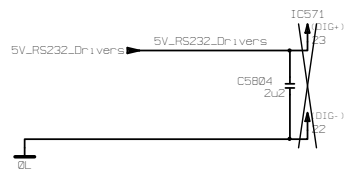


COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20
	PREV. DATE: 2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12
PROPERTY OF:	17 SHEET 130 - 4
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	

#570 Port 0 and 1
Maximum speed 38k4

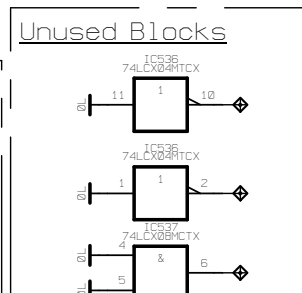
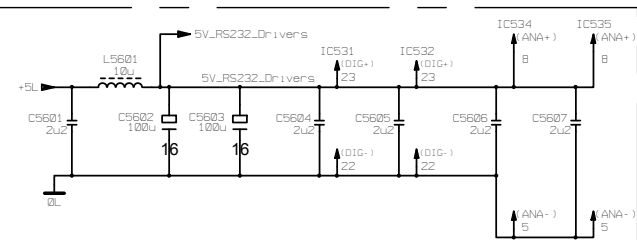
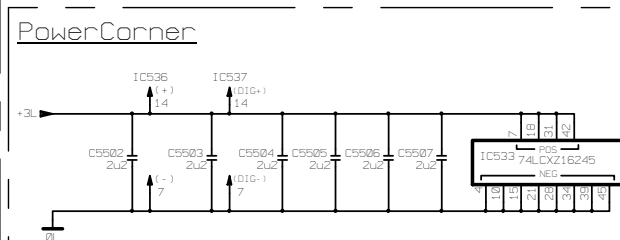
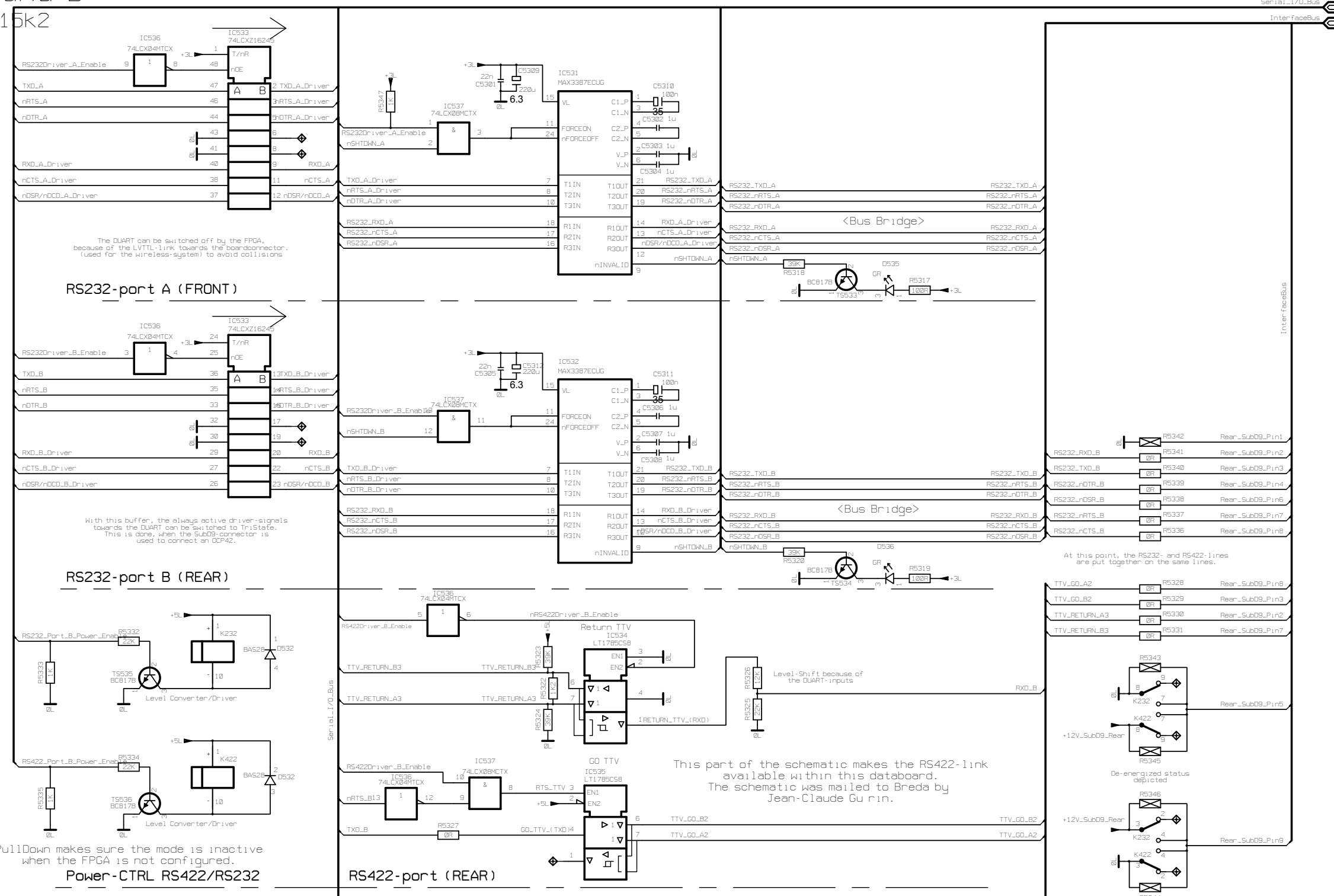


PowerCorner



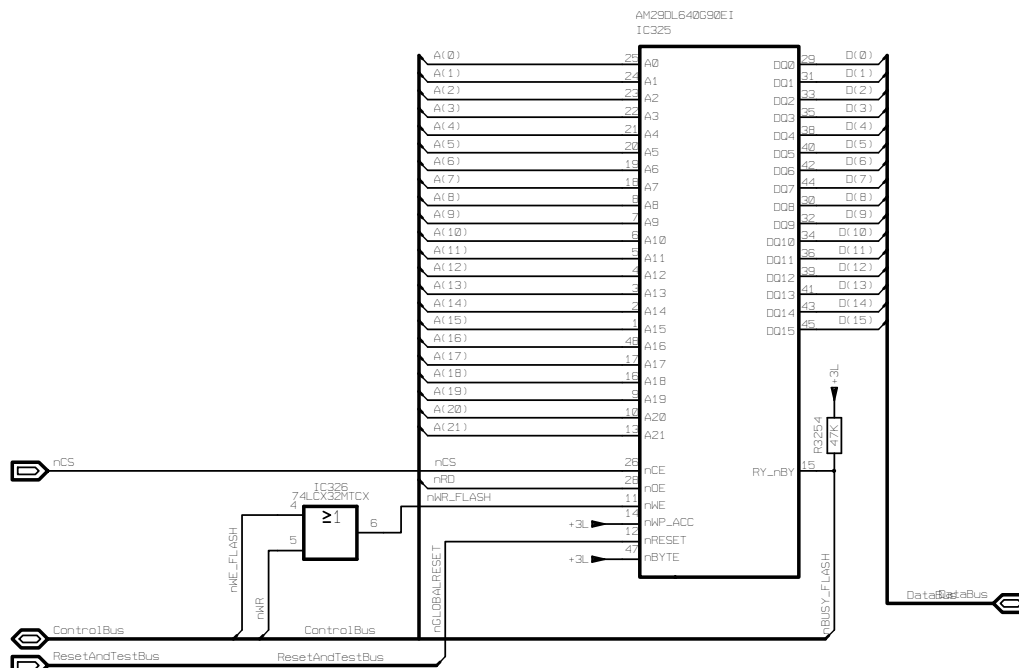
COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED		
ASS.NO:	3922 406 50010	
ASS.NAME:	ETHERN-DATABOARD BS	
STATUS:	09	
PCB.NO:	3922 411 50012	
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20	
	PREV. DATE: 2007-09-26	
R. VAN GEEL	ORG. DATE: 2002-06-12	
PROPERTY OF:	17	SHEET 130 - 5
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS		

#530 Port A and B
Maximum speed 115k2



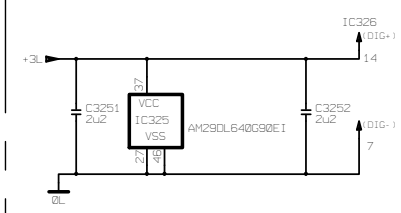
COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED		
ASS.NO:	3922 406 50010	
ASS.NAME:	ETHERN-DATABOARD BS	
STATUS:	09	
PCB.NO:	3922 411 50012	
CIRCUIT DIAGRAM	CURR. DATE:	2008-02-20
	PREV. DATE:	2007-09-26
R. VAN GEEL	ORG. DATE:	2007-06-12
PROPERTY OF:	17	SHEET 130 - 6
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS		

#325 FLASH

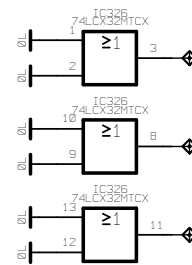


The FLASH can only be overwritten, when both
nWR and nWE_FLASH are active.
nWE_FLASH is a user-I/O pin on the 80386.

PowerCorner



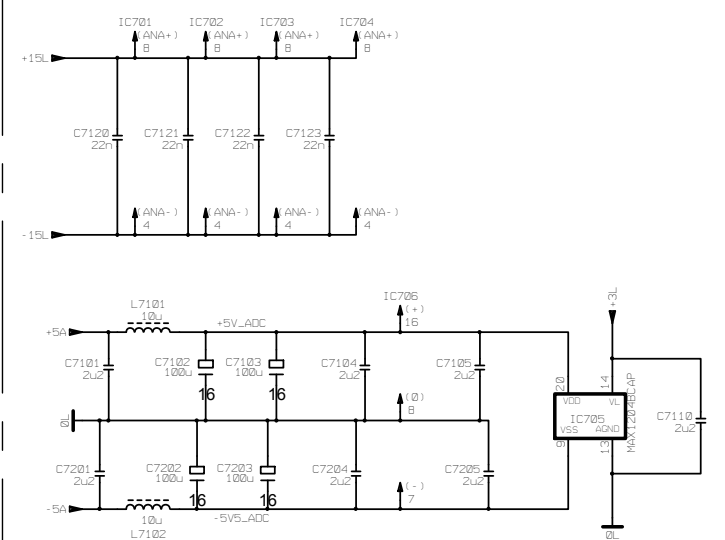
Unused Blocks



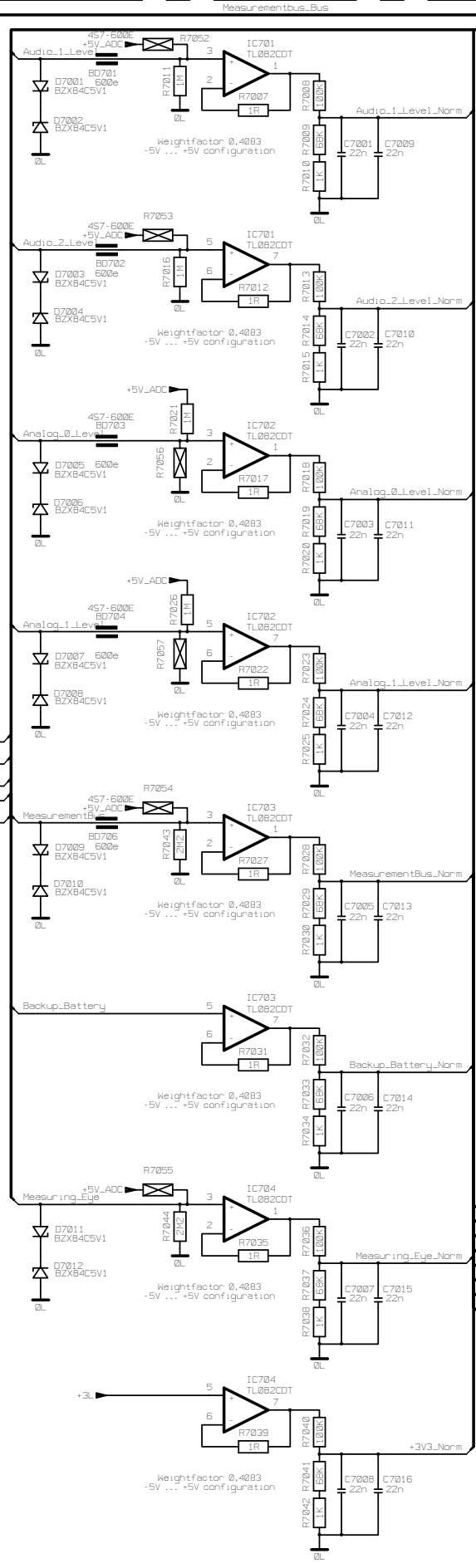
COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20
	PREV. DATE: 2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12
PROPERTY OF:	17 SHEET 130 - 7
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	

#700 Measurement

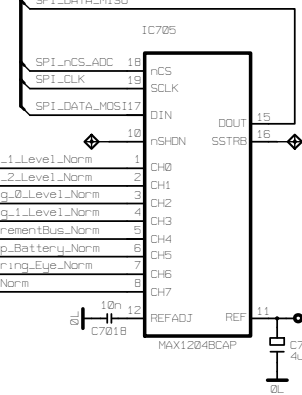
PowerCorner



Note that the maximum load of a signal that is connected to the measurementbus, is 1kOhms. A smaller resistance will have effect on the accuracy of the measurements.



InterfaceBus

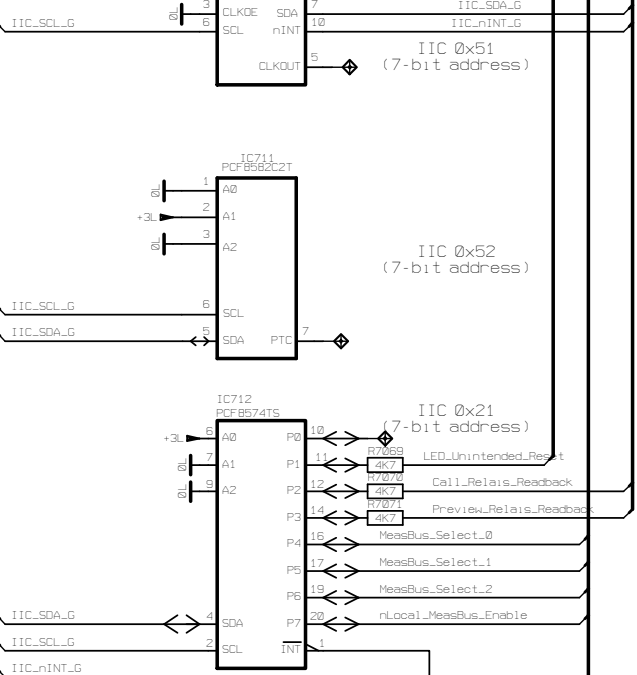


The ADC is configured in Differential-mode. This means, that each of the analogue inputs, can hold a voltage between -2,048V and +2,048V. In order to measure signals that are larger than these ranges, the voltages are divided first.

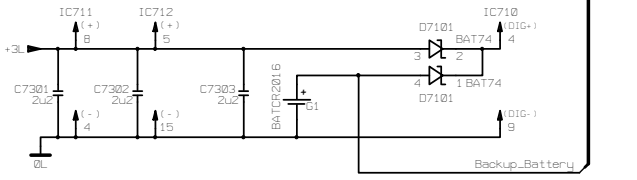
If nSHDN is pulled to 3V3, the ADC is in Internal-Compensation mode. The maximum frequency for SPI-CLK is then limited to 400kHz. Floating, SPI-CLK is max. 2Hz, but power-up takes longer.

Ideal case: 4,096V

Local IIC

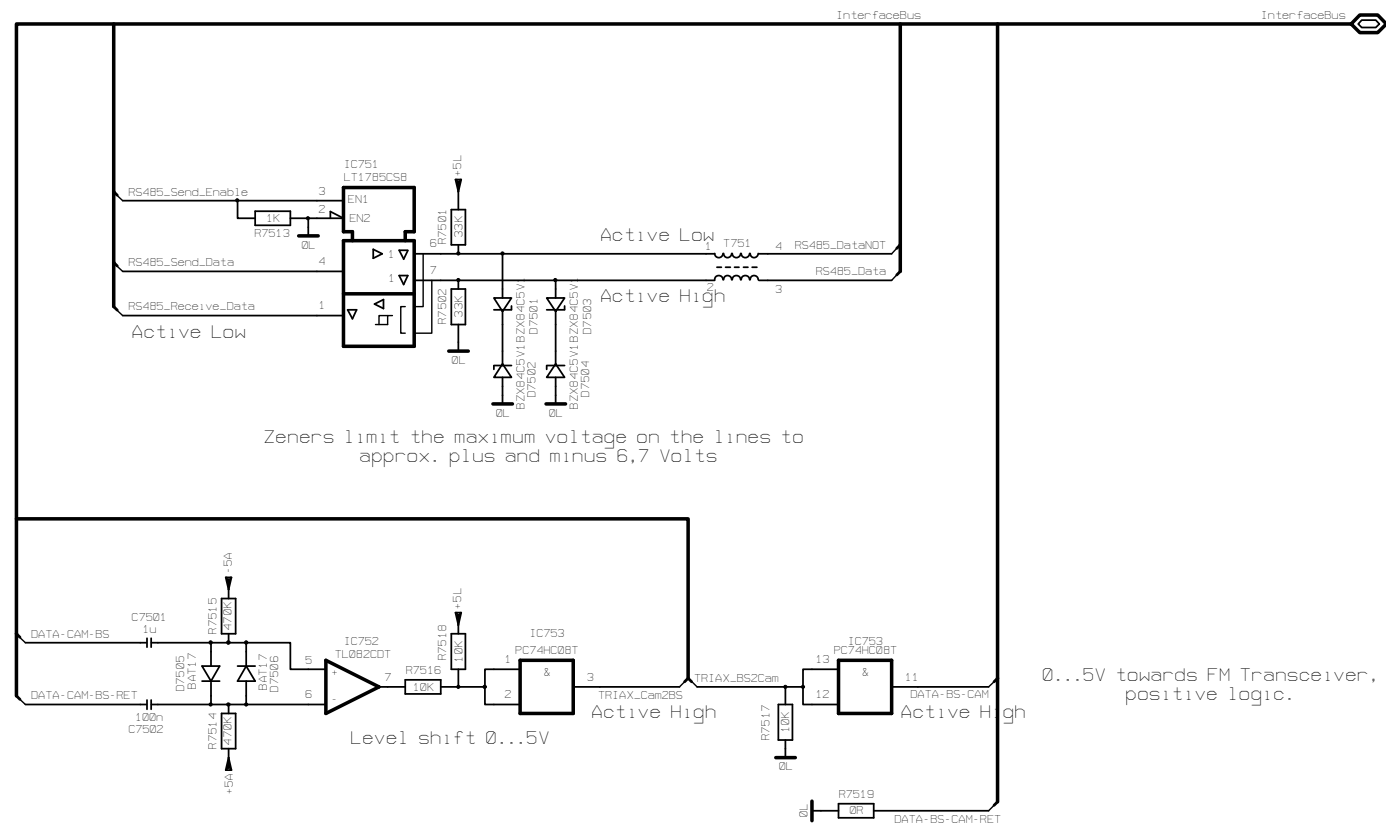


PowerCorner

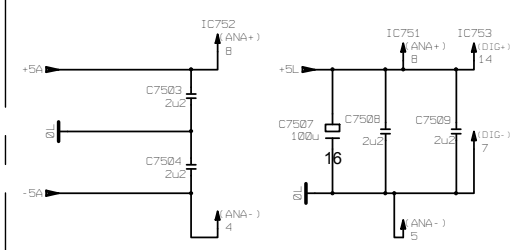


COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20
R. VAN GEEL	PREV. DATE: 2007-09-26
PROPERTY OF:	17
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	SHEET 130 - 8

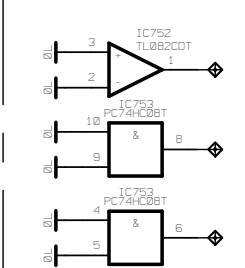
#750 TWB/DataLink/Triax



PowerCorner

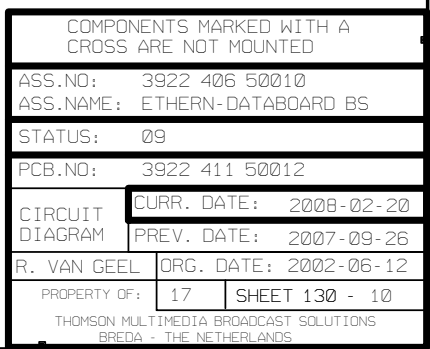


Unused Blocks

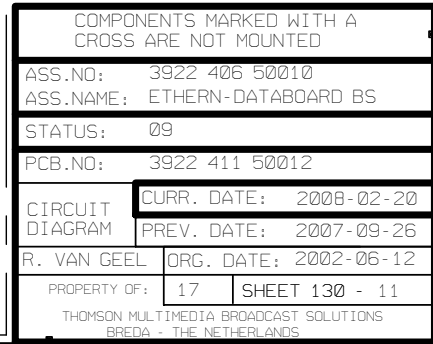


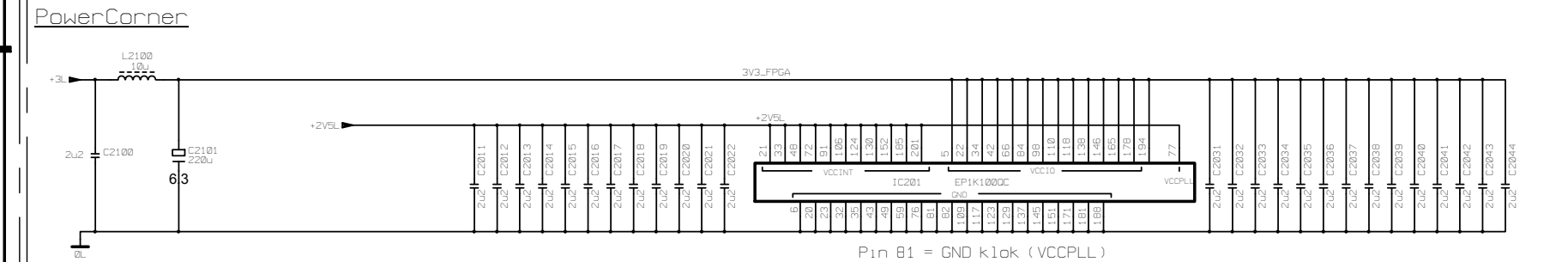
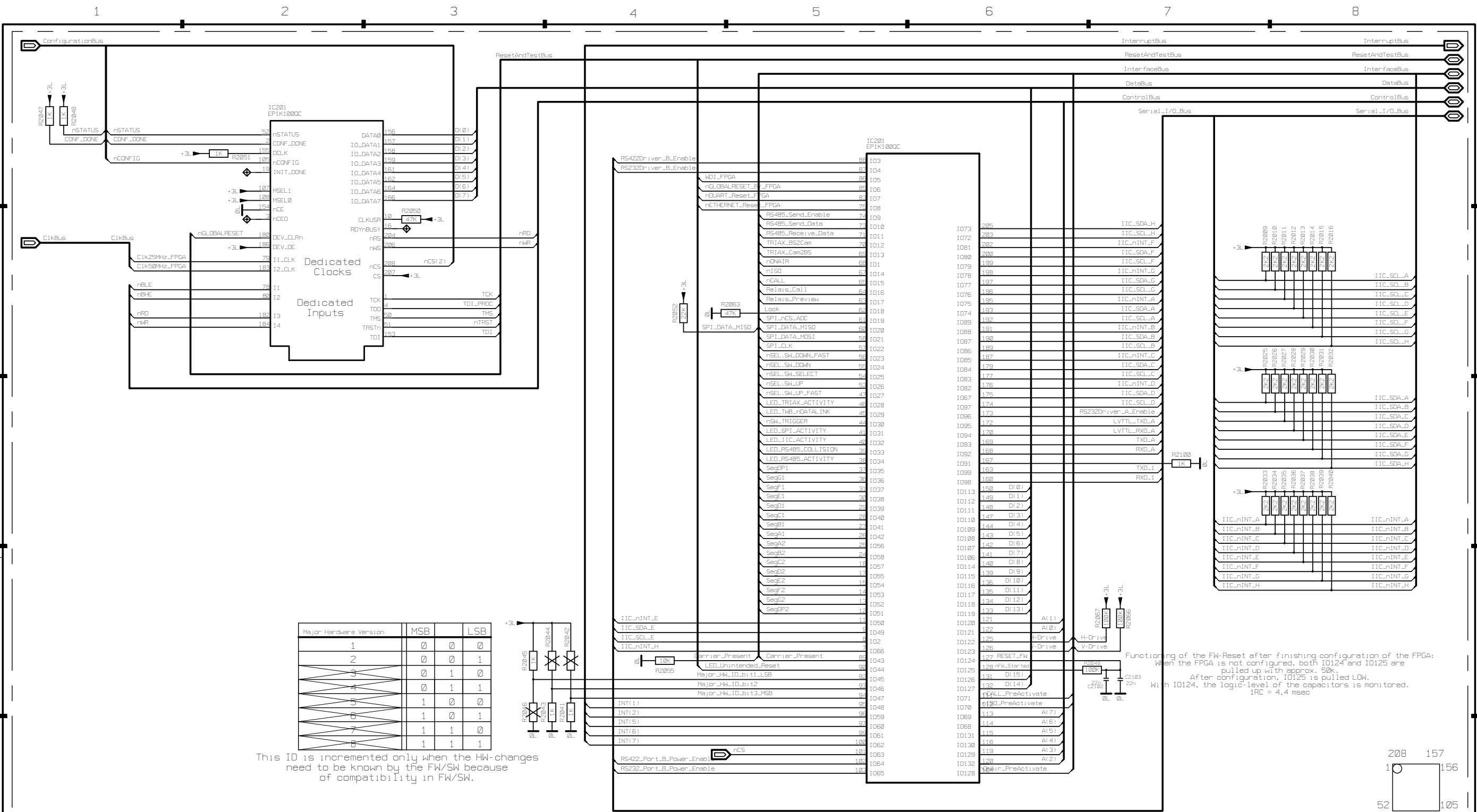
COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED

ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20
	PREV. DATE: 2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12
PROPERTY OF:	17 SHEET 130 - 9
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	



PowerCorner



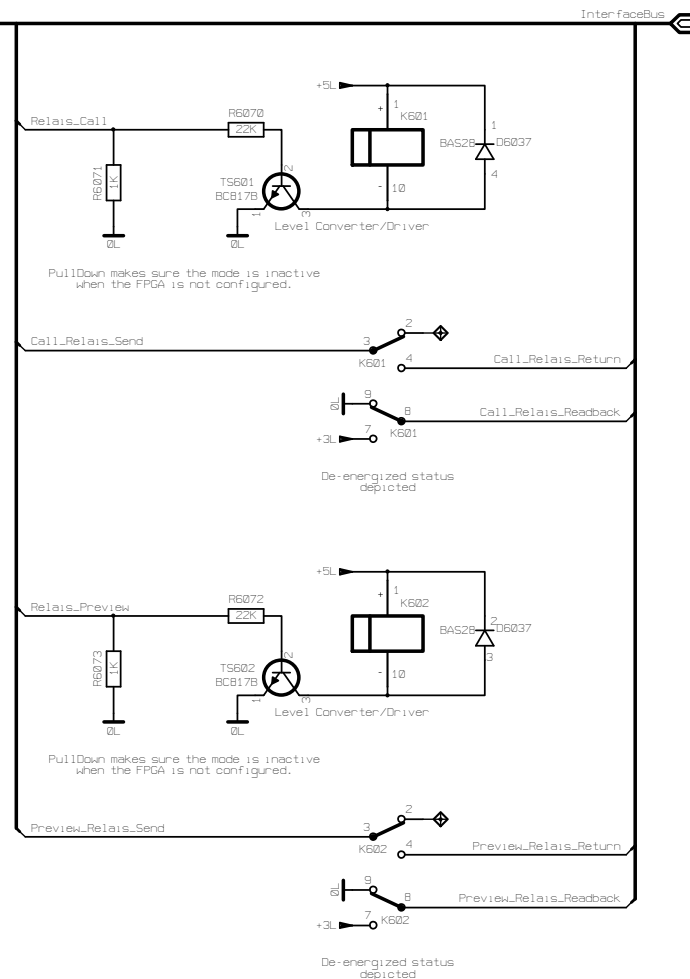
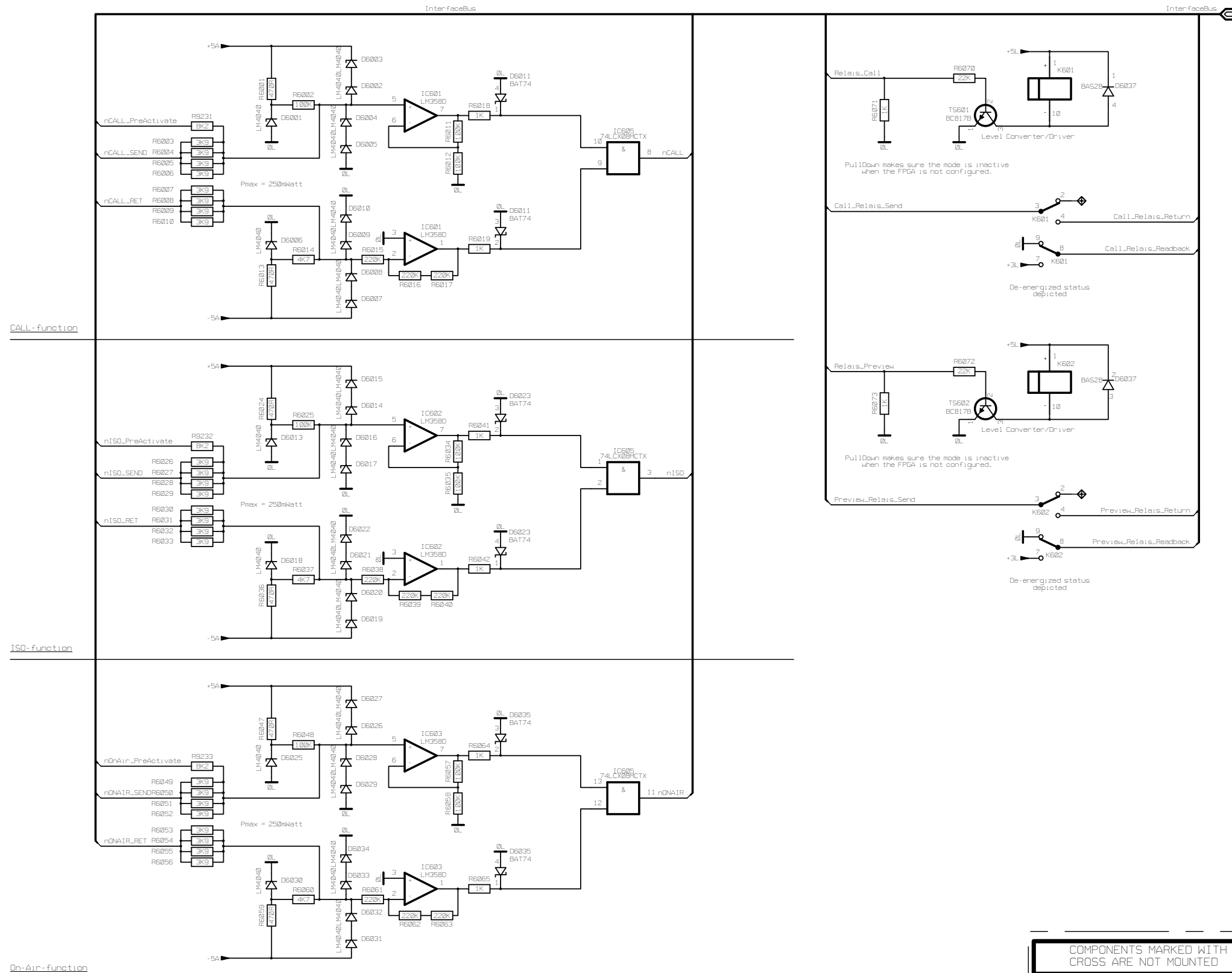


Functioning of the FW-Reset after finishing configuration of the FPGA:
When the FPGA is not configured, both I0124 and I0125 are pulled up with approx. 50k.
After configuration, I0125 is pulled LOW.
With I0124, the logic-level of the capacitors is monitored.
1RC = 4,4 msec

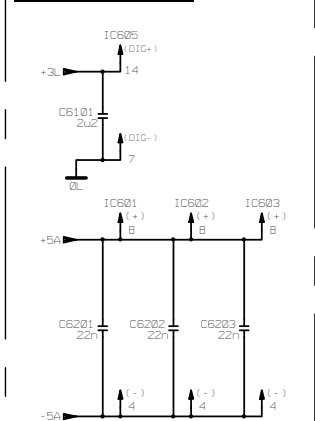
#200 FPGA

COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20
	PREV. DATE: 2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12
PROPERTY OF:	17 SHEET 130 - 12
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	

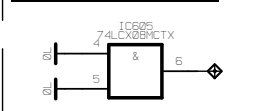
#600 Signalling



PowerCorner

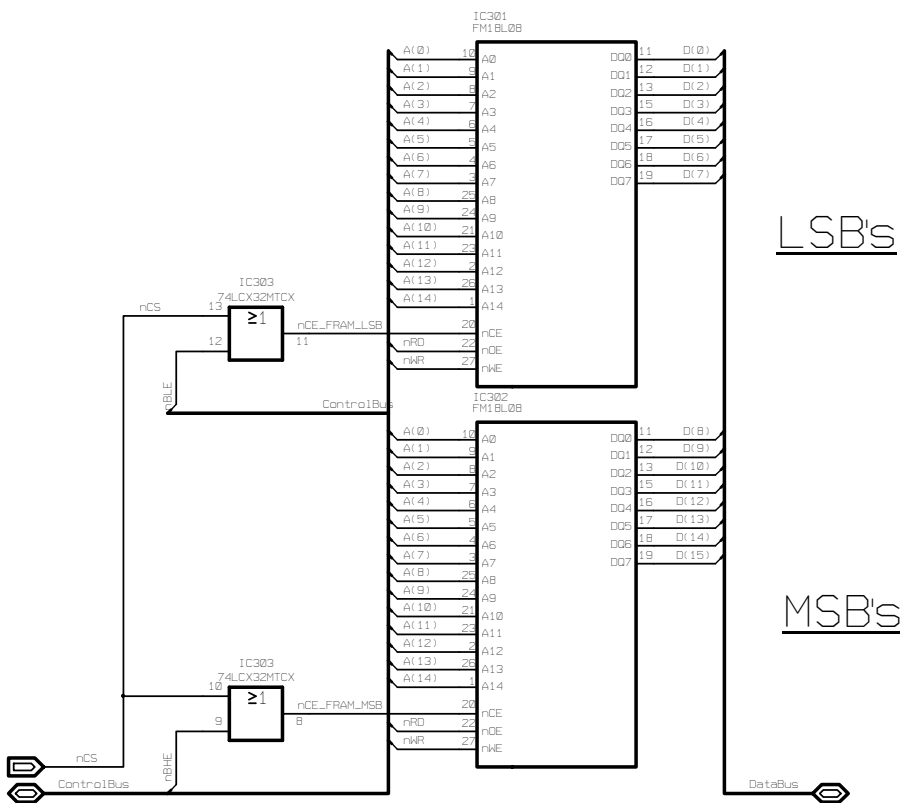


Unused Blocks

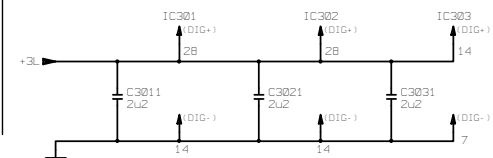


COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20
	PREV. DATE: 2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12
PROPERTY OF:	17 SHEET 130 - 13
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	

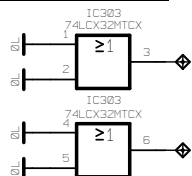
#300 nvRAM



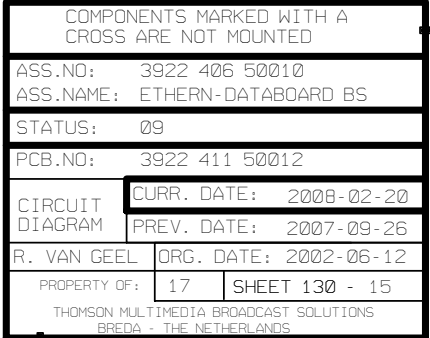
PowerCorner

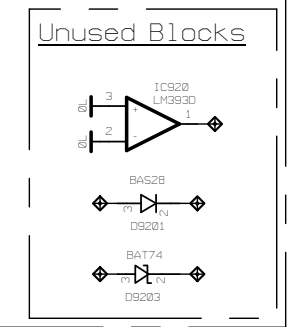
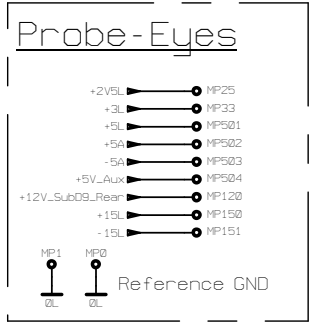
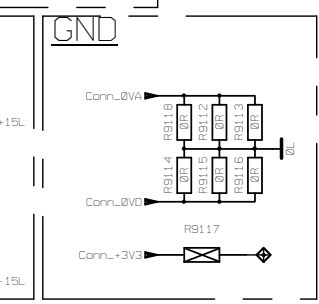
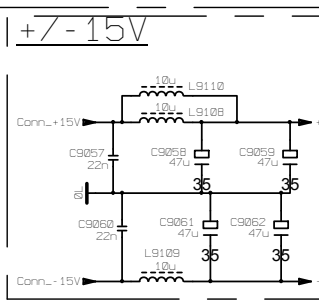
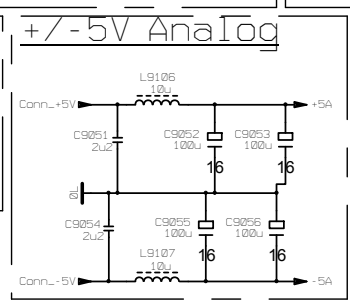
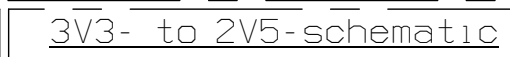


Unused Blocks

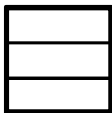
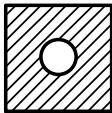
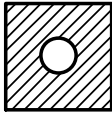


COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CURR. DATE:	2008-02-20
PREV. DATE:	2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12
PROPERTY OF:	17 SHEET 130 - 14
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	

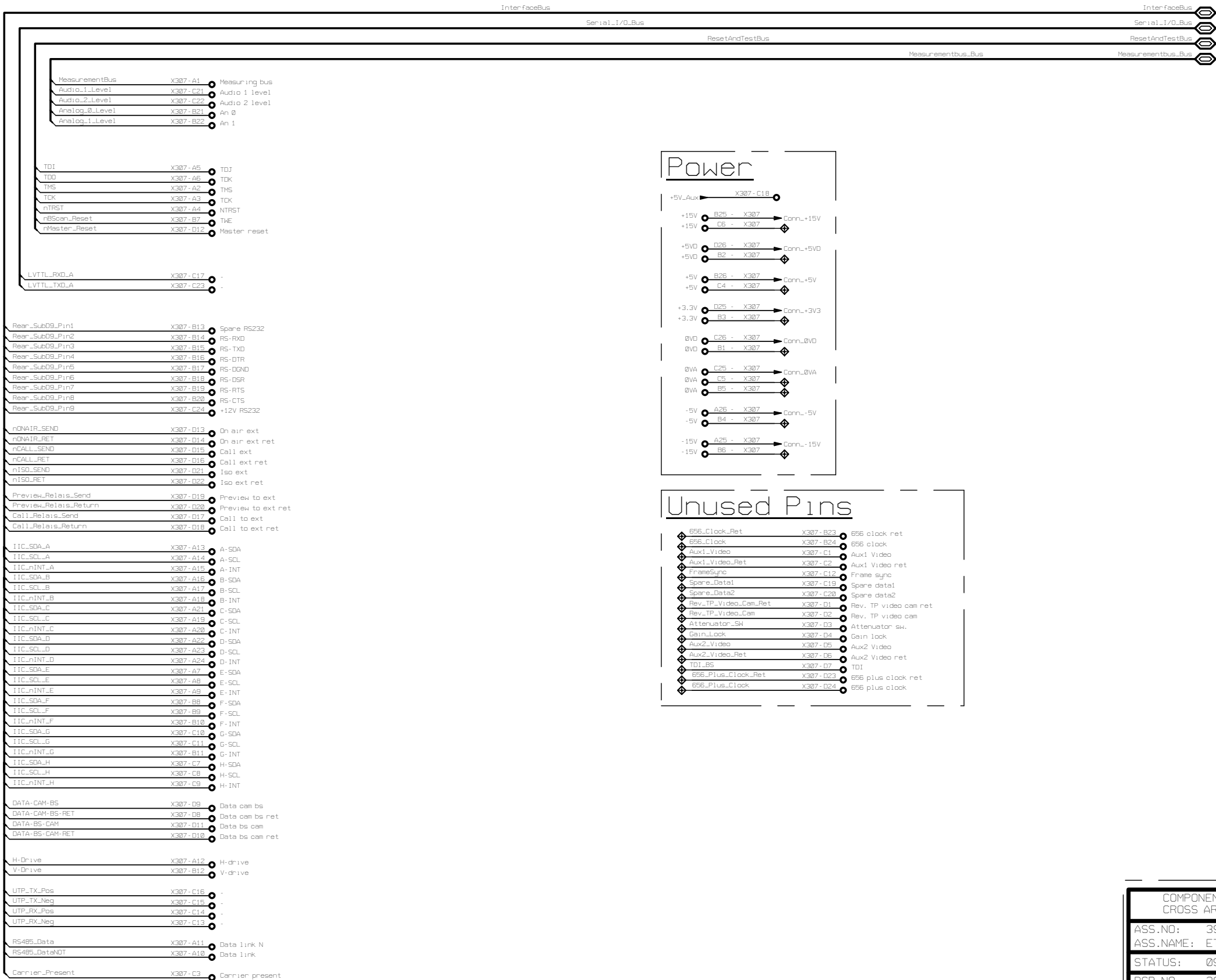




COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED		
ASS.NO:	3922 406 50010	
ASS.NAME:	ETHERN-DATABOARD BS	
STATUS:	09	
PCB.NO:	3922 411 50012	
CIRCUIT DIAGRAM	CURR. DATE:	2008-02-20
	PREV. DATE:	2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12	
PROPERTY OF:	17	SHEET 130 - 16
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BRED - THE NETHERLANDS		



#000 BoardConnector



COMPONENTS MARKED WITH A CROSS ARE NOT MOUNTED	
ASS.NO:	3922 406 50010
ASS.NAME:	ETHERN-DATABOARD BS
STATUS:	09
PCB.NO:	3922 411 50012
CIRCUIT DIAGRAM	CURR. DATE: 2008-02-20
	PREV. DATE: 2007-09-26
R. VAN GEEL	ORG. DATE: 2002-06-12
PROPERTY OF:	17 SHEET 130 - 17
THOMSON MULTIMEDIA BROADCAST SOLUTIONS BREDA - THE NETHERLANDS	