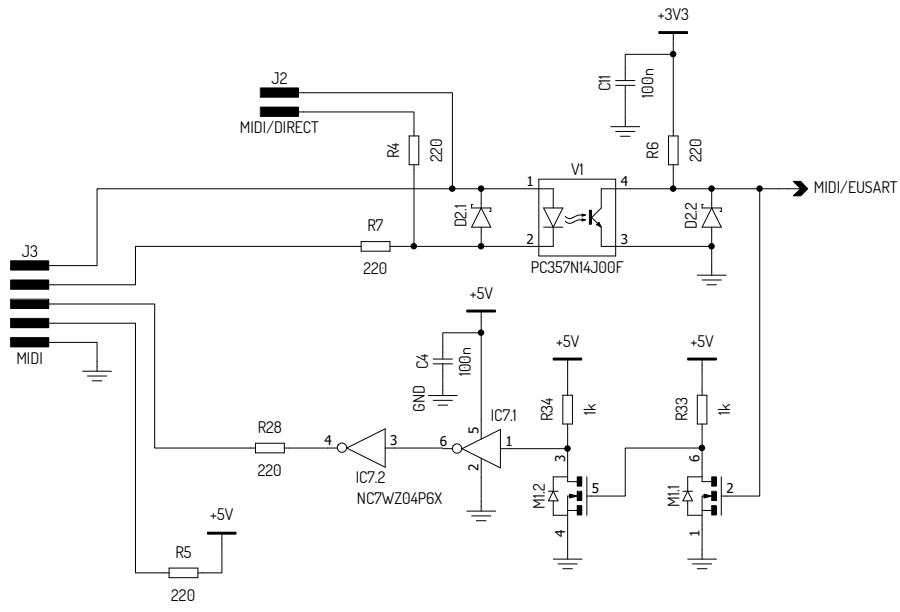
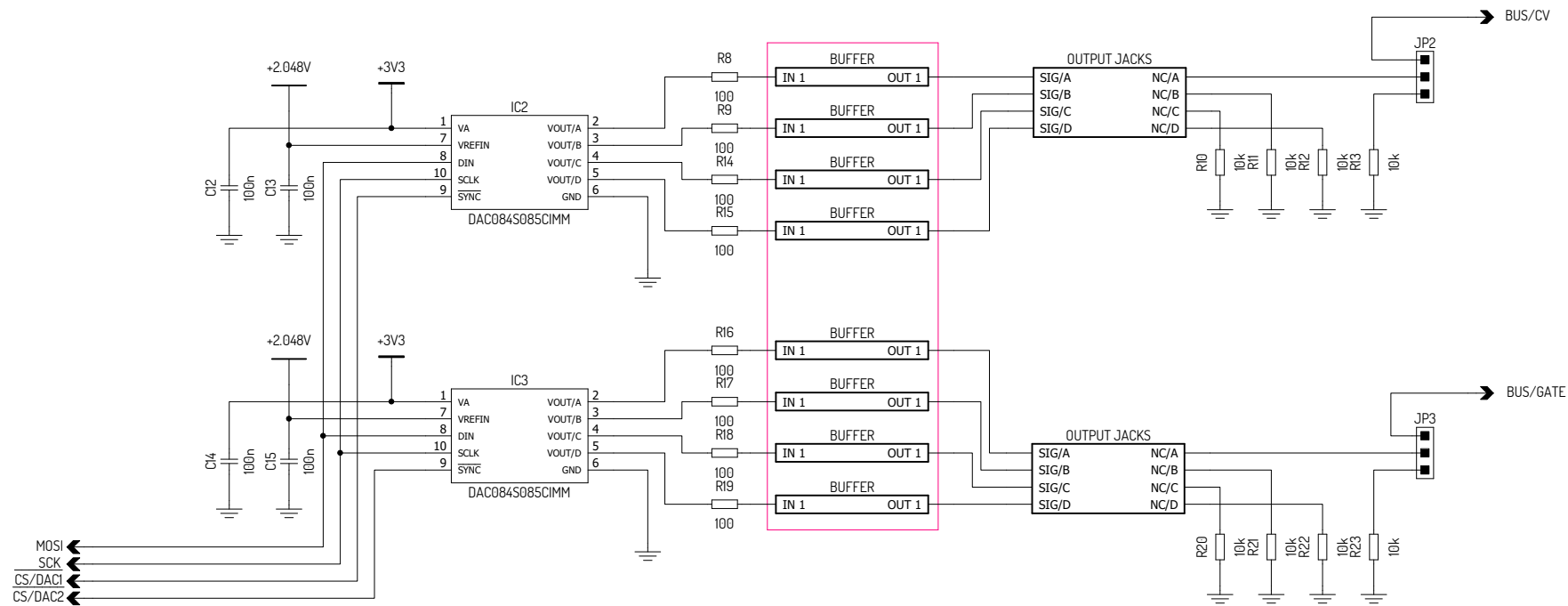


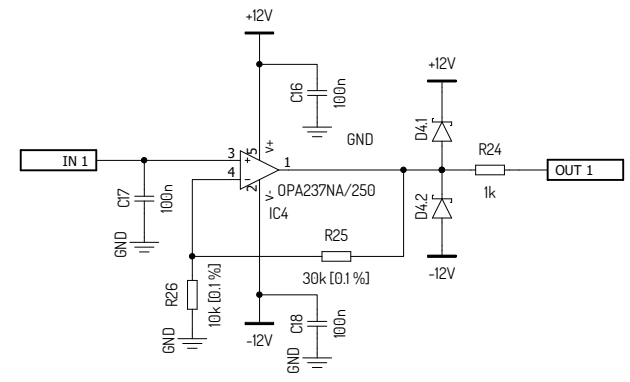
JBMCVI	1	BASELINE MIDI TO CV/GATE INTERFACE			ART. NO.	
DESIGNED BY LUNDKVIST	CHECKED BY LUNDKVIST	APPROVED BY LUNDKVIST - 2016-03-10	REVISION G	DATE 2016-03-10	SCALE 1:1	
THE MIDI TO CV/GATE INTERFACE CAN BE CONFIGURED OVER SYSEX. EACH OUTPUT CAN BE SPECIFIED TO BE ANYTHING MIDI. SEPARATE DACS FOR EACH OUTPUT PROVIDES A LOT OF POSSIBILITIES.		JBMCVI_RevG.dch				
		MAIN	EDITION 1.0	SHEET 1/6		



JBMCVI	1	MIDI INTERFACE TO UART			ART. NO.	
DESIGNED BY LUNDKVIST		CHECKED BY LUNDKVIST		APPROVED BY LUNDKVIST - 2016-03-10	REVISION G	DATE 2016-03-10
RESISTOR R6 IS NOMINALLY 280 OHM FOR +5V LOGIC LEVELS. SINCE WE RUN 3.3V, WE USE 220 OHM.				JBMCVI_RevG.dch		
				MIDI		EDITION 1.0



JBMCVI	1	DA CONVERTER STAGE FOR OUTPUTS			ART. NO.	
DESIGNED BY LUNDKVIST	CHECKED BY LUNDKVIST	APPROVED BY LUNDKVIST - 2016-03-10	REVISION G	DATE 2016-03-10	SCALE 1:1	
DAC CAN BE DAC124S085C1MM FOR 12-BIT RESOLUTION. THIS DESIGN USES 8-BIT. THERE'S ALSO 10-BIT AVAILABLE.			JBMCVI_RevG.dch			
A SET OF TERMINATION RESISTORS ARE USED FOR UNUSED OUTPUTS. JP2 AND JP3 CAN BE USED TO ALLOW THE INTERFACE MODULE TO SEND CV/GATE TO THE EUROBUS SYSTEM WHEN OUTPUT 1/5 ARE LEFT UNCONNECTED.			DAC		EDITION 1.0	SHEET 3/6

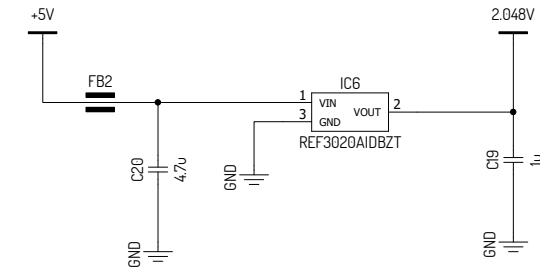
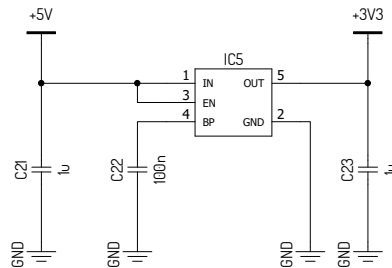
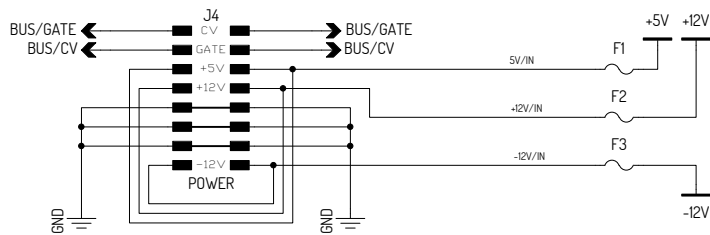


JBMCVI	8	BASELINE MIDI TO CV/GATE INTERFACE			ART. NO.		
DESIGNED BY LUNDKVIST		CHECKED BY LUNDKVIST		APPROVED BY LUNDKVIST - 2016-03-10	REVISION G	DATE 2016-03-10	SCALE 1:1
DAC WILL OUTPUT A VOLTAGE BETWEEN 0 AND 2.048 V. 4 TIMES GAIN GIVES 8.192 OCTAVES OF DYNAMIC RANGE. HERE WE USE PRECISION RESISTORS TO GET VERY CLOSE TO 4 TIMES GAIN. ANY SCALING ERRORS CAN BE CALIBRATED IN FIRMWARE.				JBMCVI_RevG.dch			
				BUFFER		EDITION 1.0	SHEET 4/6

1 2 3 4 5 6 7 8

A

A



B

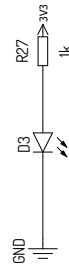
B

C

C

D

D



E

E

F

F

JBMCVI	1	POWER SUPPLY AND REGULATION			ART. NO.	
DESIGNED BY LUNDKVIST	CHECKED BY LUNDKVIST	APPROVED BY LUNDKVIST - 2016-03-10	REVISION G	DATE 2016-03-10	SCALE 1:1	
THE POWER CONNECTIONS TO EUROBUS ARE FUSED (100 MA). A SMALL LED SHOW THAT THE ON-BOARD LOGIC LEVEL REGULATOR IS OPERATIONAL.			JBMCVI_RevG.dch			
			POWER	EDITION 1.0	SHEET 5/6	

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

A

A

B

B

C

C

D

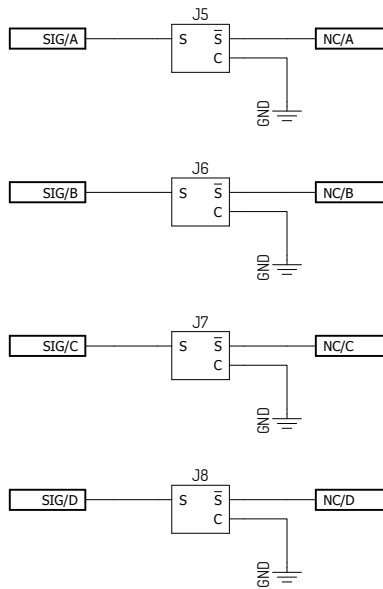
D

E

E

F

F



JBMCVI	2	OUTPUT JACKS BLOCK / ROW			ART. NO.		
DESIGNED BY LUNDKVIST		CHECKED BY LUNDKVIST		APPROVED BY LUNDKVIST - 2016-03-10	REVISION G	DATE 2016-03-10	SCALE 1:1
THIS PAGE SHOWS ONE ROW OF OUTPUTS. THE MODULE USES 2 ROWS IN TOTAL.					JBMCVI_RevG.dch		
					OUTPUT JACKS		

1 2 3 4 5 6 7 8