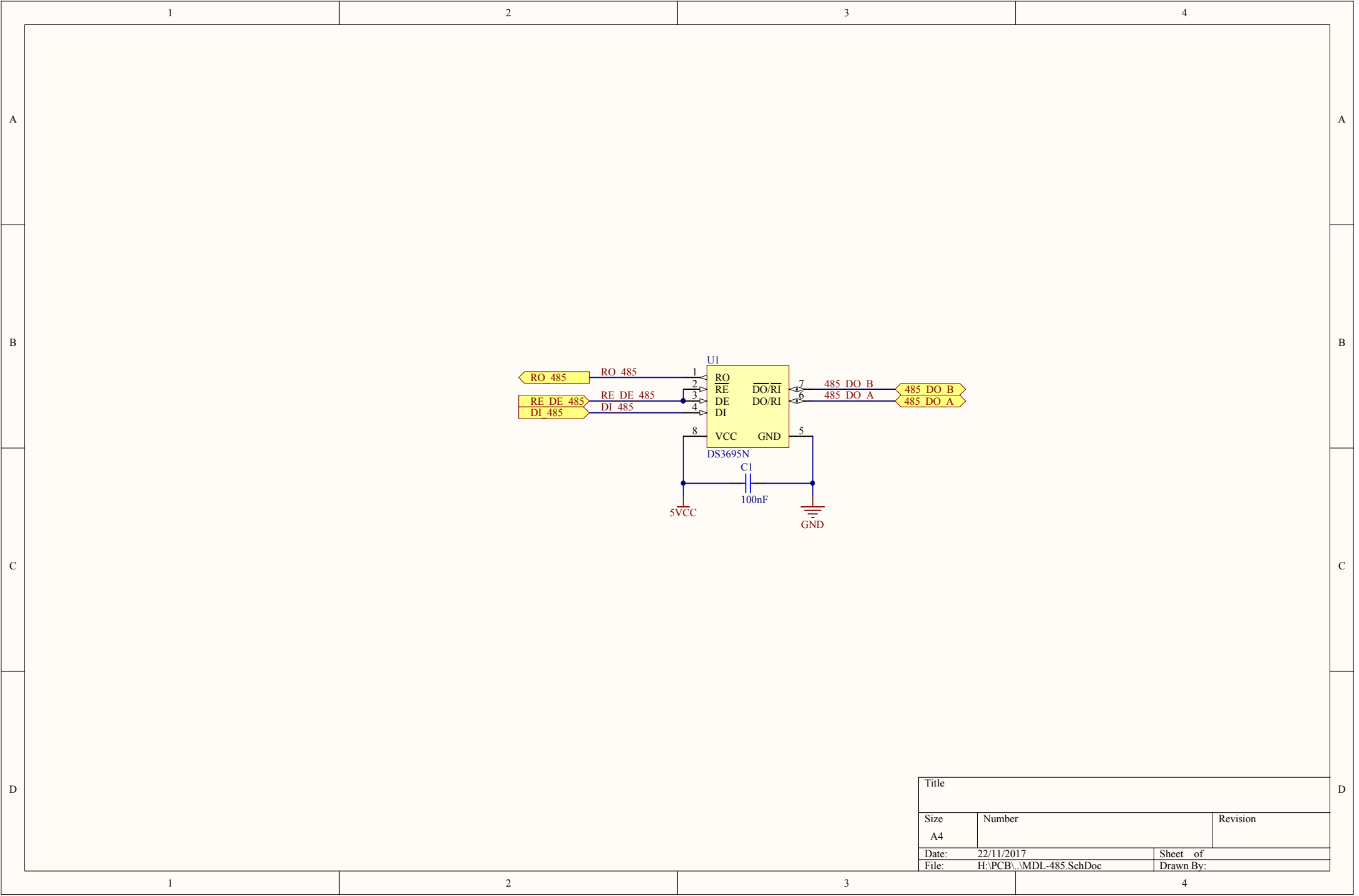
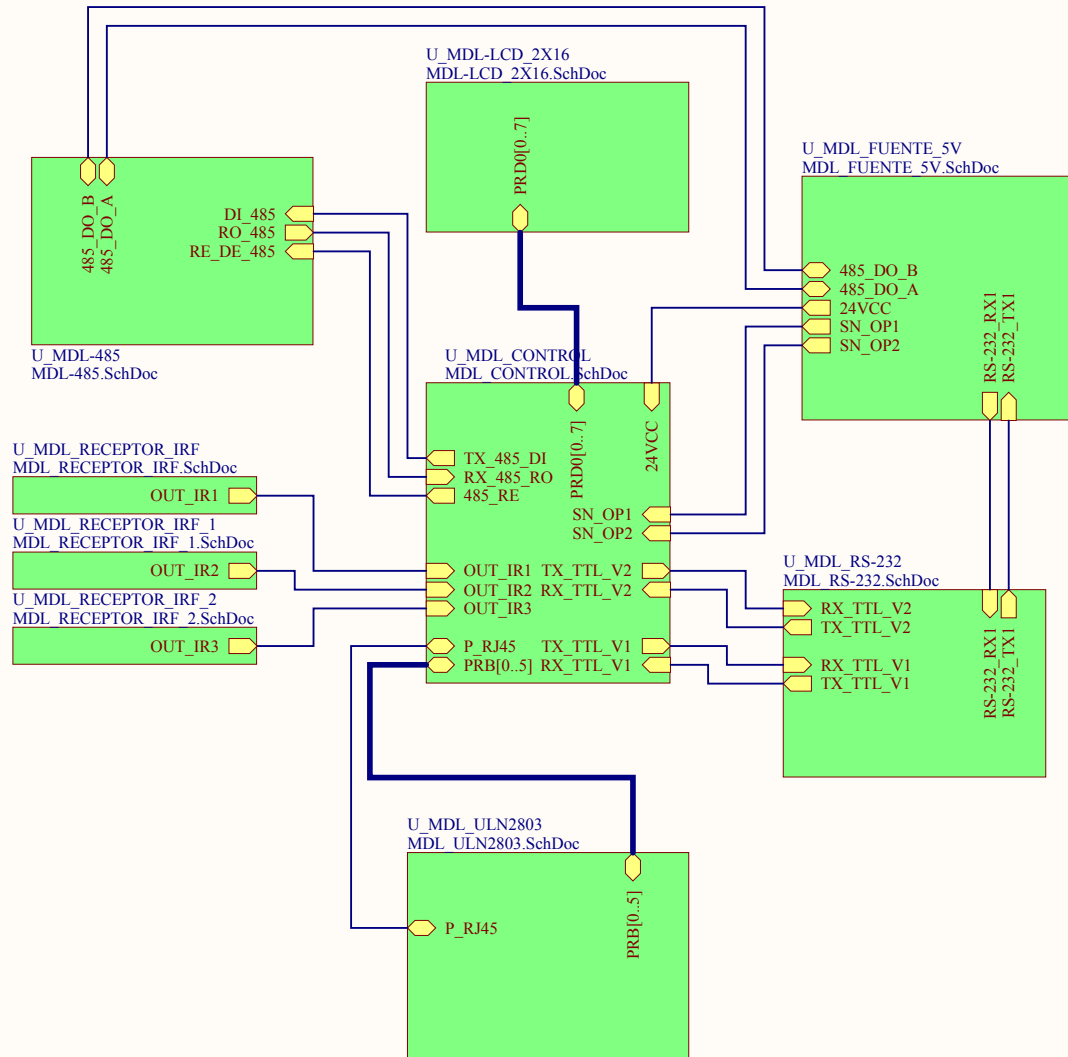


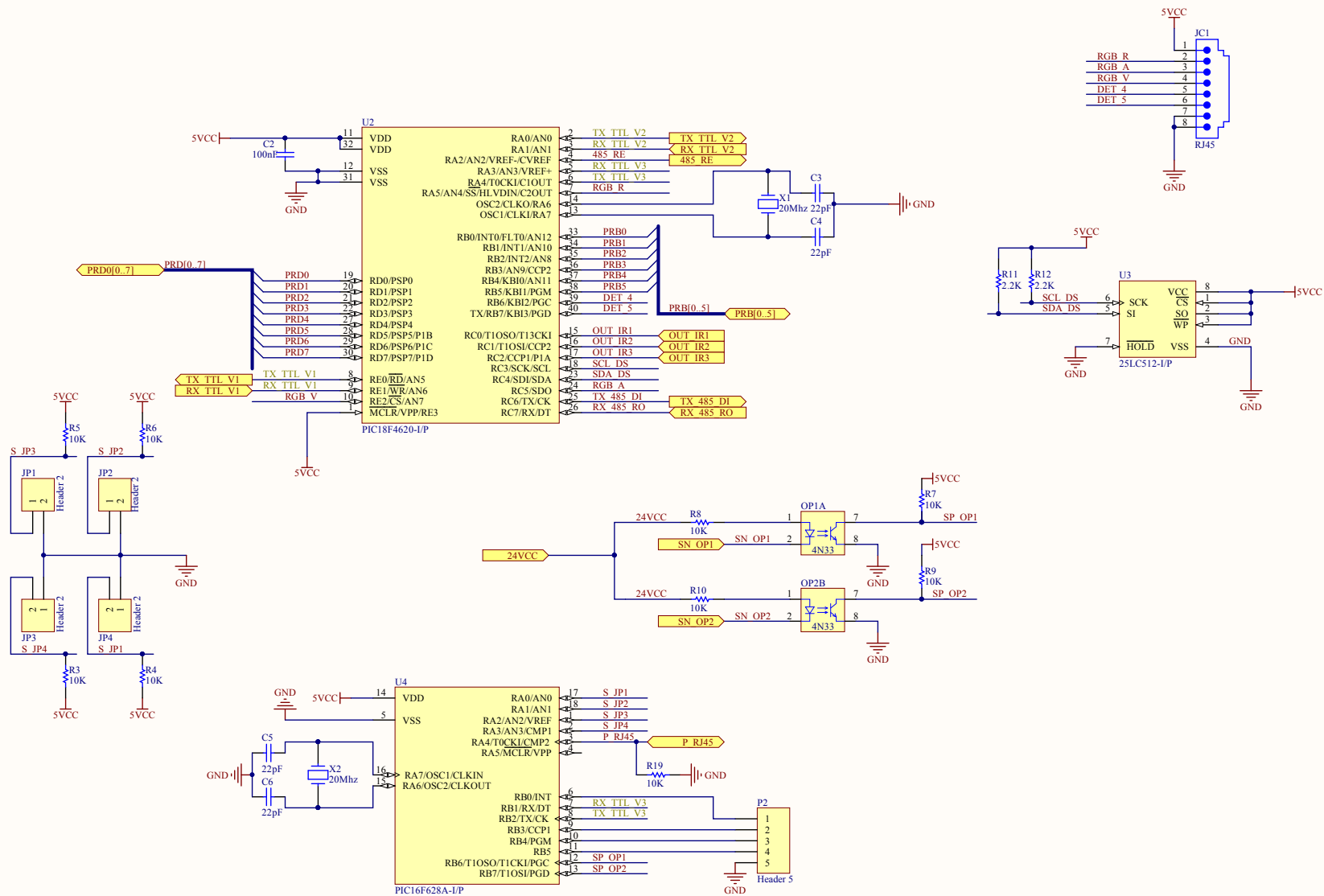
Title		
Size	Number	Revision
A4		
Date:	22/11/2017	Sheet of
File:	H:\PCB\...MDL_RS-232_SchDoc	Drawn By:

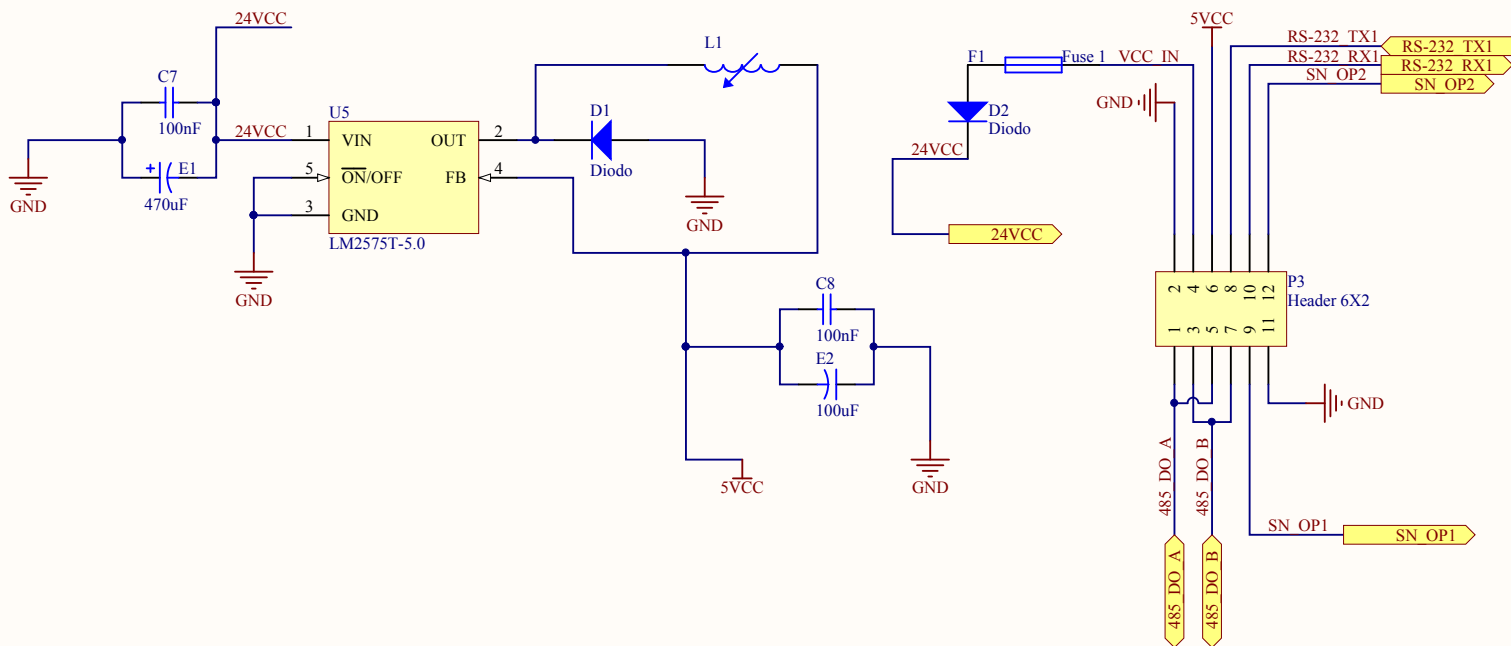




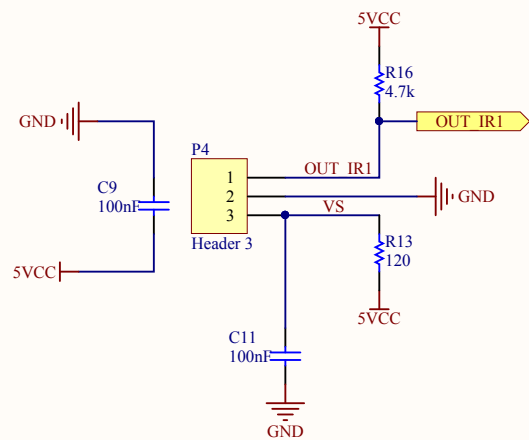


Title			
Size	Number		Revision
A4			
Date:	22/11/2017		Sheet of
File:	H:\PCB\...\CPBCC.SchDoc		Drawn By:

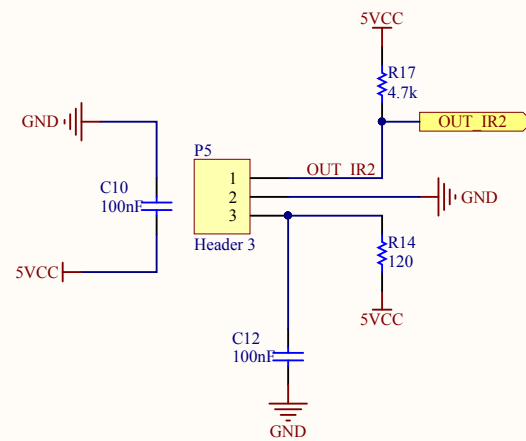




Title			
Size	Number		Revision
A4			
Date:	22/11/2017		Sheet of
File:	H:\PCB\MDL FUENTE 5V.SchDoc		Drawn By:

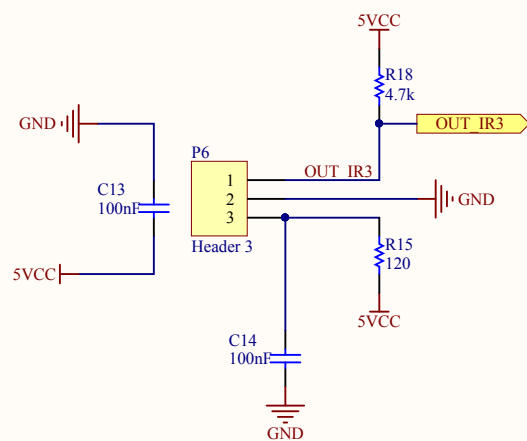


Title		
Size A4	Number	Revision
Date:	22/11/2017	Sheet of
File:	H:\PCB\MDL_RECEPTOR_IRF.SchDoc	Drawn By:

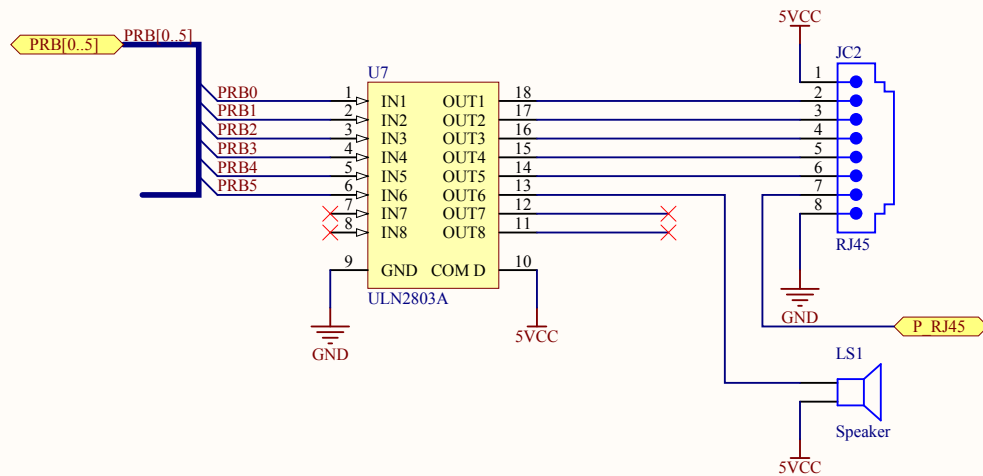


Title		
Size A4	Number	Revision
Date:	22/11/2017	Sheet of
File:	H:\PCB\MDL RECEPTOR_IRF 1.Sch	Drawn By:





Title		
Size A4	Number	Revision
Date:	22/11/2017	Sheet of
File:	H:\PCB\MDL RECEPTOR_IRF 2.Sch	Drawn By:



Title		
Size	Number	Revision
A4		
Date:	22/11/2017	Sheet of
File:	H:\PCB\MDL_ULN2803.SchDoc	Drawn By:

```
-----  
-- SubModule MDL_CONTROL  
-- Created 15/01/2015 15:18:32  
-----
```

**Library** *IEEE*;

**Use** *IEEE.Std\_Logic\_1164.all*;

**entity** MDL\_CONTROL **is port**

```
(  
    PRD0      : inout std_logic_vector(0 to 7);  
    TX_TTL_V2 : out   std_logic;  
    RX_TTL_V2 : in    std_logic;  
    TX_485_DI : out   std_logic;  
    RX_485_RO : in    std_logic;  
    485_RE    : out   std_logic;  
    TX_TTL_V1 : out   std_logic;  
    RX_TTL_V1 : in    std_logic;  
    PRB       : inout std_logic_vector(0 to 7);  
    SN_OP1    : in    std_logic;  
    SN_OP2    : in    std_logic  
);
```

**end** MDL\_CONTROL;

```
-----  
architecture Structure of MDL_CONTROL is
```

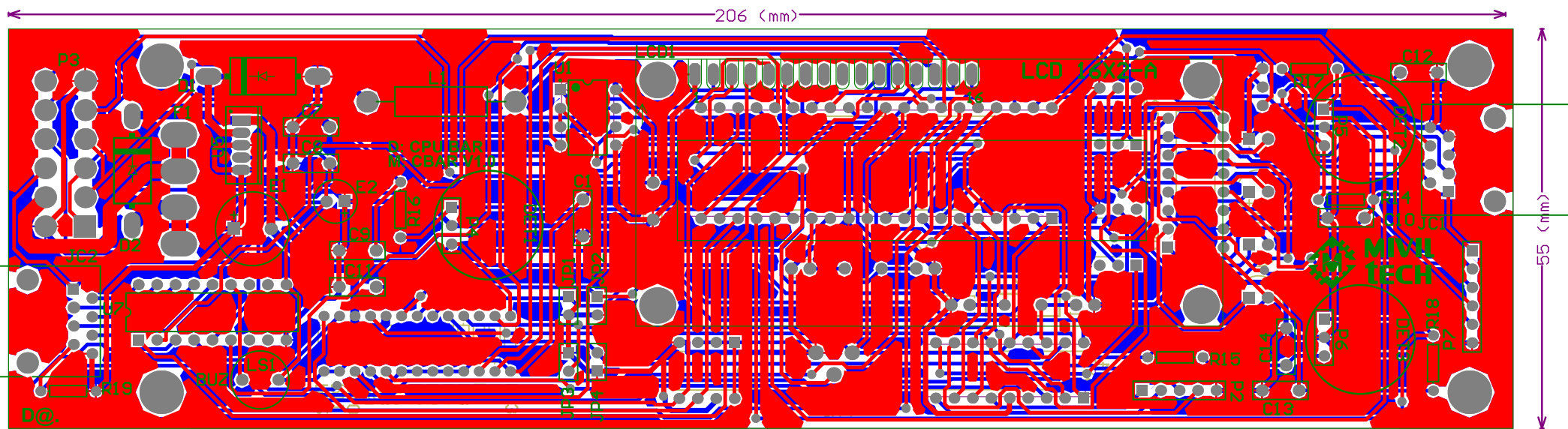
-- *Component Declarations*

-- *Signal Declarations*

**begin**

**end** Structure;

```
-----
```



Comment	Description	Designator	Footprint	LibRef	Quantity
VP44BY224JB	Dipped Radial Multilayer Ceramic Capacitor X7R: 220nF, 100V	C1, C2, C7, C8, C9, C10, C11, C12, C13, C14	VP44-2.5	VP44BY224JB	10
VP31BA220JB	Dipped Radial Multilayer Ceramic Capacitor COG (NPO): 22pF, 100V	C3, C4, C5, C6	VP31-2.5	VP31BA220JB	4
Cap2	Capacitor	C15, C16, C17, C18, E2	C1UF	Cap2	5
Diodo	Diodo rectificador	D1, D2	1N4000	Diodo	2
Cap Pol1	Polarized Capacitor (Radial)	E1	C1000UF	Cap Pol1	1
Fuse 1	Fuse	F1	fusible1	Fuse 1	1
RJ45	Right Angle, Standard Profile, RJ45-Keyed, Flange Mount PCB Jack	JC1, JC2	15-43-6233	15-43-6233	2
Header 2	Header, 2-Pin	JP1, JP2, JP3, JP4	HDR1X2	Header 2	4
Inductor Adj	Adjustable Inductor	L1	AXIAL-0.8	Inductor Adj	1
LCD 16X2	LCD 16X2 Character Icd	LCD1	LCD 16x2-A	LCD 16X2	1
Speaker	Loudspeaker	LS1	C100UFA	Speaker	1
4N33	Optocoupler, Phototransistor Output, Dual Channel, TTL Compatible, Pb-free	OP1, OP2	4n35_4n33_6pines	ILD74	2
Header 5	Header, 5-Pin	P2	HDR1X5	Header 5	1
Header 6X2	Header, 6-Pin, Dual row	P3	FP_CON12PAUTZ	Header 6X2	1
Header 3	Header, 3-Pin	P4, P5, P6	HDR1X3	Header 3	3
Header 6	Header, 6-Pin	P7	HDR1X6	Header 6	1
PT	Square Trimming Potentiometer	PR1	potenciometro	RPot SM	1
2N3904	NPN General Purpose Amplifier	Q1	2N3904_OK	2N3904	1
Res	Resistor	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19	AXIAL-0.3	Res1	19
DS3695N	Multipoint RS485/RS422 Transceiver/Repeater	U1	N08E	DS3695N	1
PIC18F4620-I/P	Enhanced Flash Microcontroller with 10-Bit A/D and nanoWatt Technology, 64K Flash, 40-Pin PDIP, Industrial Temperature Range	U2	PDIP600-P40	PIC18F4620-I/P	1
25LC512-I/P	512 Kbit SPI Bus Serial EEPROM, 8-Pin PDIP, Industrial Temperature	U3	memoria 24lc215_invertido	25LC512-I/P	1
PIC16F628A-I/P	FLASH-Based 8-Bit CMOS Microcontroller with nanoWatt Technology, 2K (x14-Bit words) FLASH, 224 Bytes SRAM, 18-Pin PDIP, 3.0 to 5.5V Supply Range, Industrial Temperature	U4	PDIP300-P18	PIC16F628A-I/P	1
LM2575T-5.0	SIMPLE SWITCHER 1A Step-Down Voltage Regulator	U5	T05A	LM2575T-5.0	1
MAX232N	Dual EIA-232 Driver/Receiver	U6	N016	MAX232N	1
ULN2803A	High-Voltage, High-Current Darlington Array	U7	A18	ULN2803A	1
20Mhz	Cristal de cuarzo	X1, X2	XTAL-1	Cristal de cuarzo	2