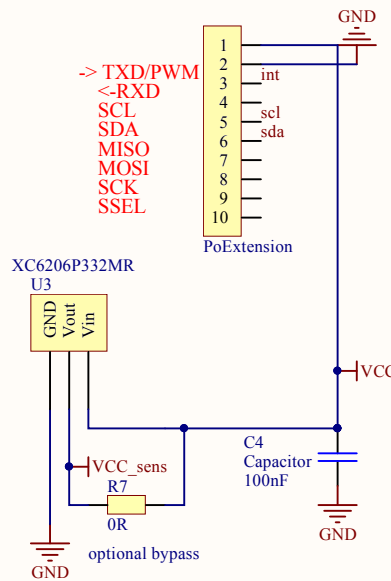


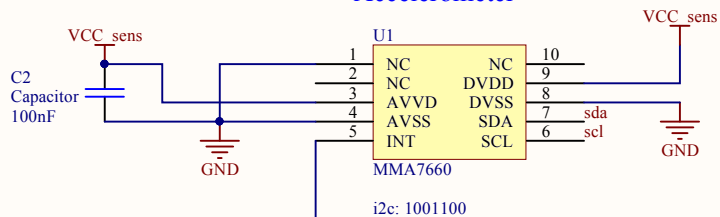
# Sensor expansion connector and voltage regulator

Do not install!

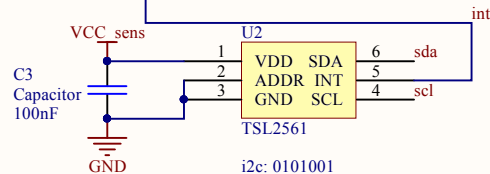


Do not install!

## Accelerometer



## Ambient light sensor

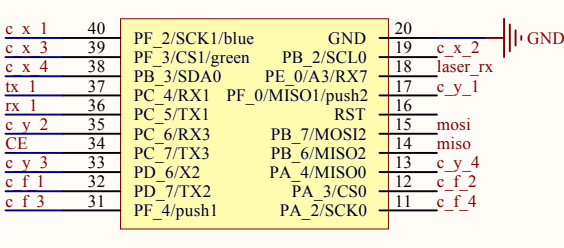
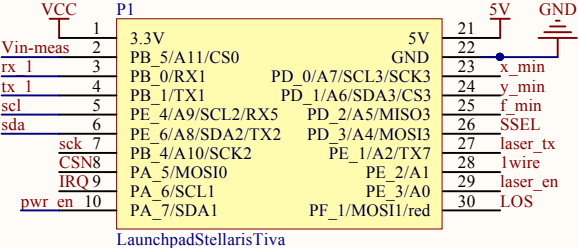
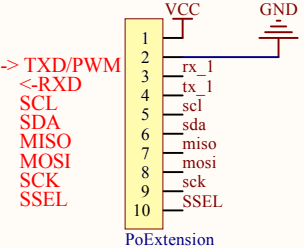


Title KORUZA shield v3.1 - Sensor expansion  
Musti - institute IRNAS Rače - [www.irnas.eu](http://www.irnas.eu)  
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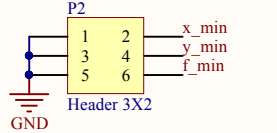
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Date:	13.4.2015	Sheet of
File:	D:\AltiumProjects\KoruzaShieldv3.SchDoc	Drawn By:

Sensor expansion

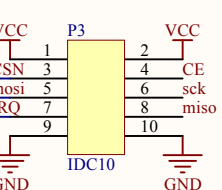


TI Launchpad Tiva C Shield connector

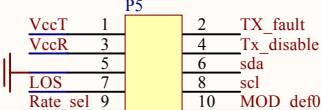
Endstop switches Currnetly not used



ENRF24L01 radio module

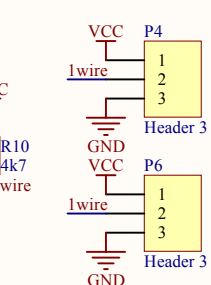


SFP module connector



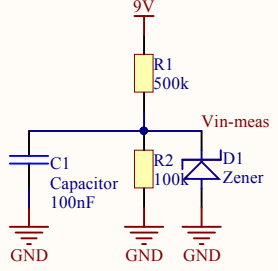
Connectors

1-wire connectors for DS18B20

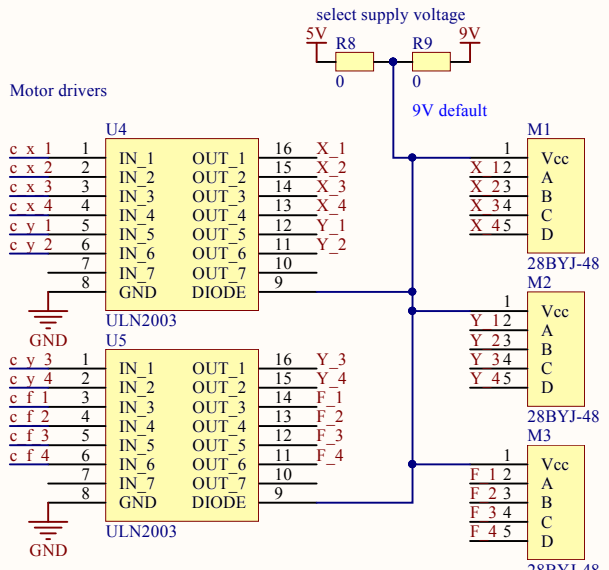


Thermometers

Potential divider for DC input voltage measurement

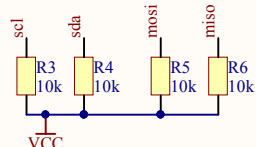


Voltage measurement

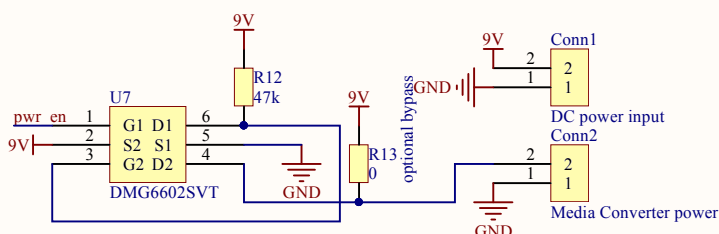


Motor driver

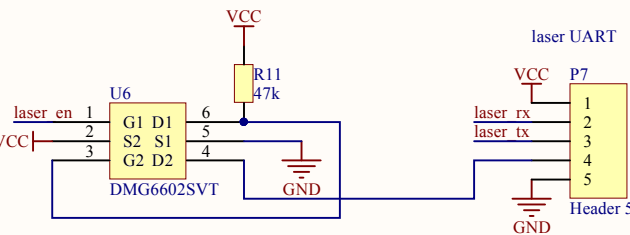
Pull-up



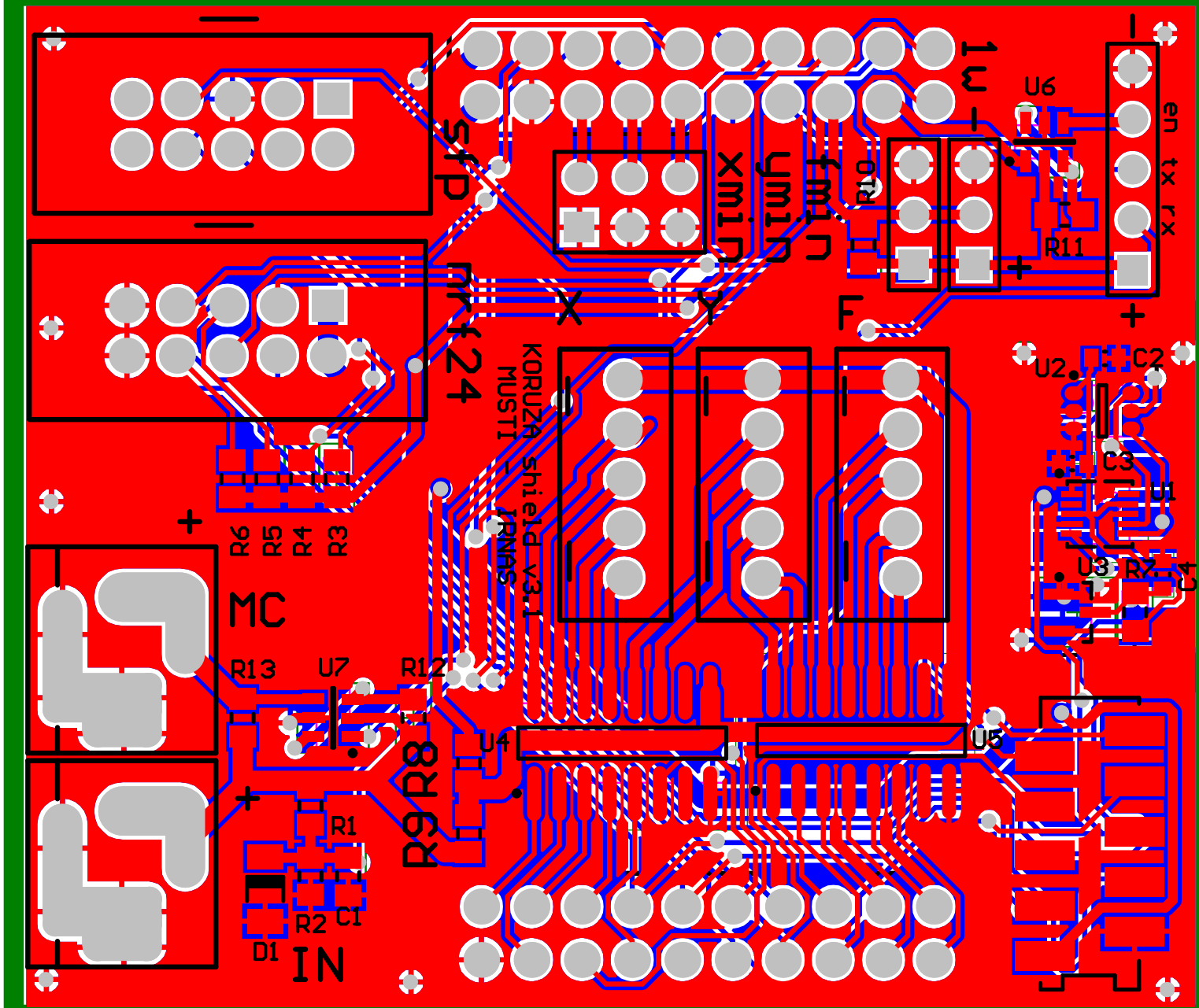
Media converter power

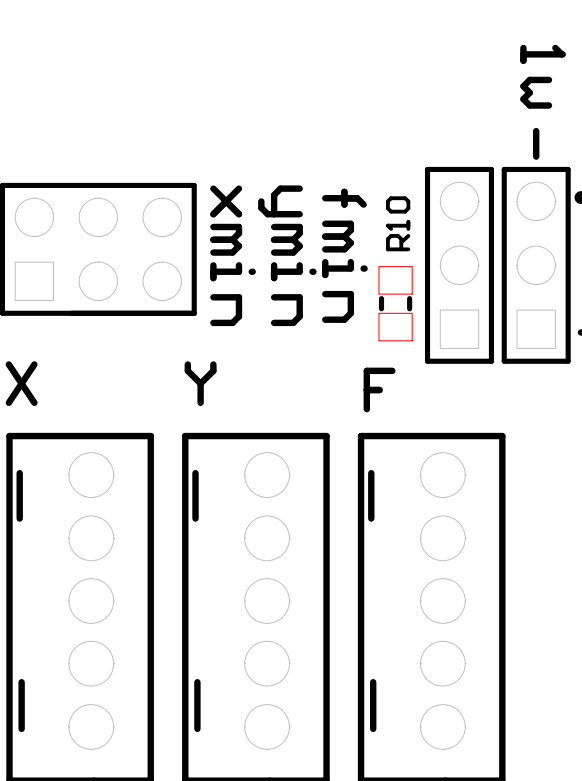
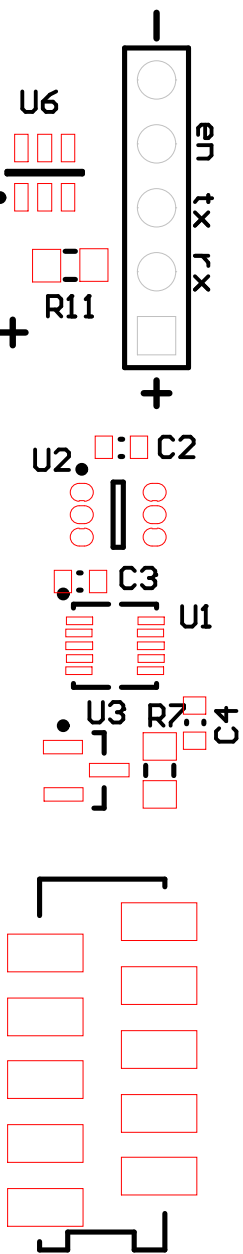


Green laser module power



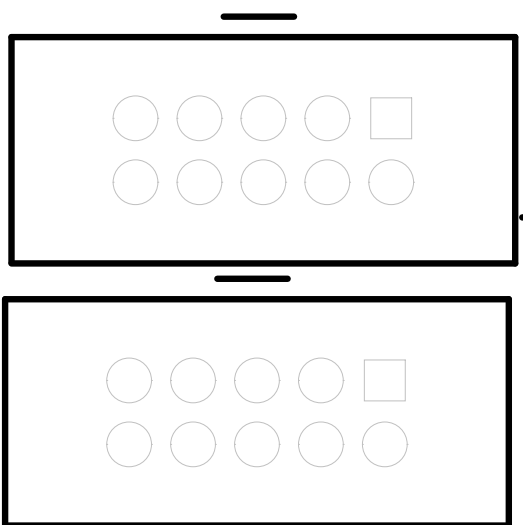
Title			KORUZA shield v3.1	
			Musti - institute IRNAS Raçe - www.irnas.eu	
			Licensed under CERN OHL V1.2	
Size		Number	Revision	
A4				
Date:		13.4.2015	Sheet of	
File:		D:\AltiumProjects\KoruzaShieldV3-IO	Solder By:	





KORUZA shield v3.1  
MUSTI - IRNAS

sfp nrf24



Comment	Description	Designator	Footprint	LibRef	Quantity
Capacitor	General capacitor	C1, C2, C3, C4	0603	Capacitor	4
DC power input		Conn1	MKDSN 2,5/ 2-5,08 and powercon	PowerScrewTerminal	1
Media Converter power		Conn2	MKDSN 2,5/ 2-5,08 and powercon	PowerScrewTerminal	1
Zener	Zener	D1	DIOMELF3517N	Zener	1
28BYJ-48	Stepper motor	M1, M2, M3	XHP-5	28BYJ-48	3
LaunchpadStellarisTiva	Stellaris= Tiva	P1	LaunchpadDual	LaunchpadStellarisTiva	1
Header 3X2	Header, 3-Pin, Dual row	P2	HDR2X3	Header 3X2	1
IDC10	IDC 10pin	P3, P5	IDC10	IDC10	2
Header 3	Header, 3-Pin	P4, P6	HDR1X3	Header 3	2
Header 5	Header, 5-Pin	P7	HDR1X5	Header 5	1
	Micro-Match female PCB connector 10 Positions THT	PoExtension	8-188275-0	1-215079-0	2
500k	Resistor 0805 smd	R1	RESC2012X06N	Resistor	1
100k	Resistor 0805 smd	R2	RESC2012X06N	Resistor	1
10k	Resistor 0805 smd	R3, R4, R5, R6	RESC2012X06N	Resistor	4
0R	Resistor 0805 smd	R7	RESC2012X06N	Resistor	1
0	Resistor 0805 smd	R8, R9, R13	RESC2012X06N	Resistor	3
4k7	Resistor 0805 smd	R10	RESC2012X06N	Resistor	1
47k	Resistor 0805 smd	R11, R12	RESC2012X06N	Resistor	2
MMA7660	MMA7660	U1	MMA7660	MMA7660	1
TSL2561	TSL2560 light sensor	U2	TSL2560	TSL2560	1
XC6206P332MR	Voltage regulator 3.3V 250mA	U3	SOT23	XC6206P332MR	1
ULN2003	Darlington array	U4, U5	SO-16 narrow	ULN2003	2
DMG6602SVT	N and P mosfet 30V 3A,	U6, U7	SOT95P245X100-6N	DMG6602SVT	2