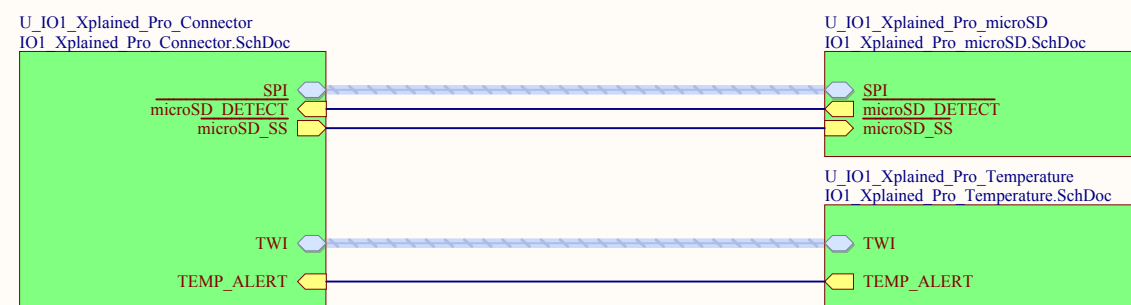


A

A

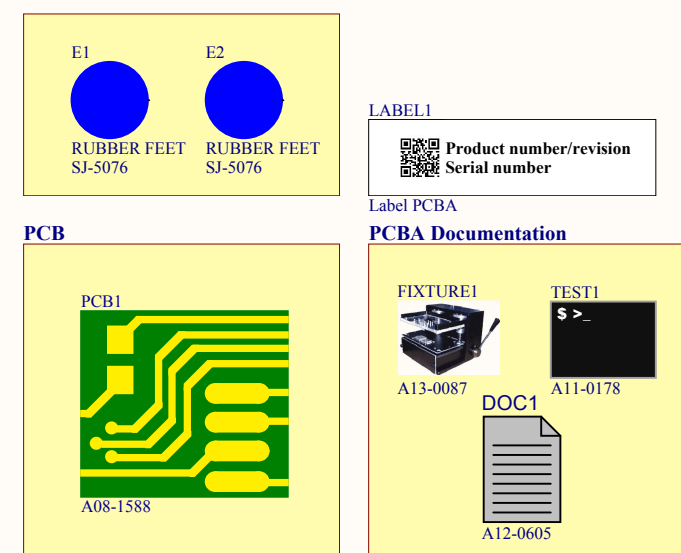
B

B




C

C

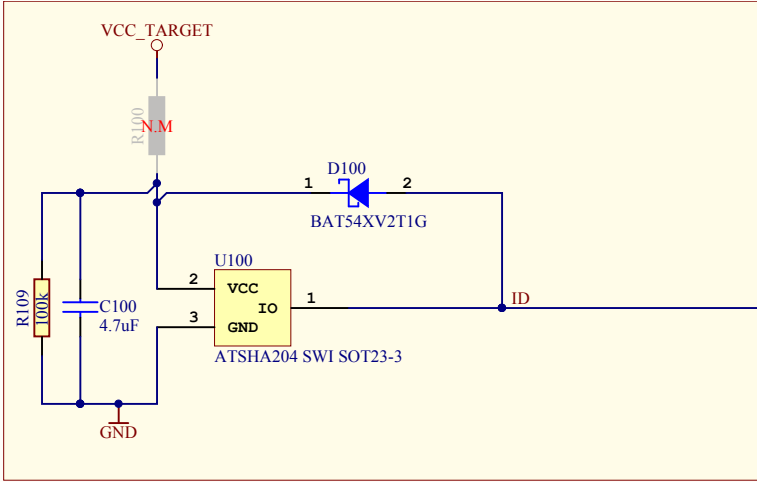


D

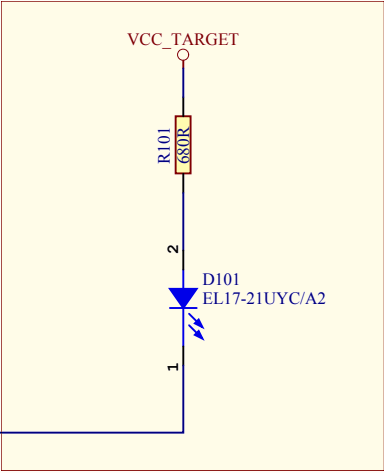
D

ATMEL Norway	*		 Enabling Unlimited Possibilities	
Vestre Rosten 79	*			
N-7075 TILLER	*			
NORWAY				
Date:	28.09.2015	13:03:14	PAGE:	1 of 4
Document number:	1		Revision:	3
TITLE: IO1 Xplained PRO				
IO1_Xplained_Pro_TopLevel.SchDoc				

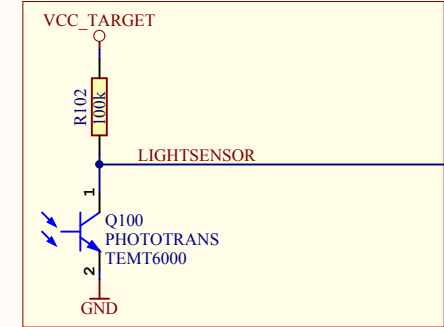
Extension Identification



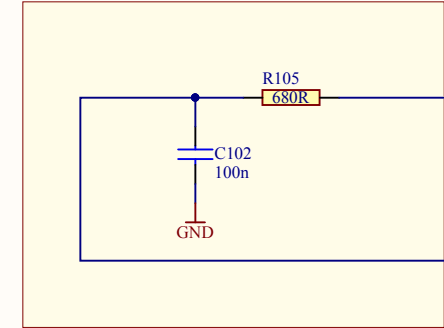
LED with PWM



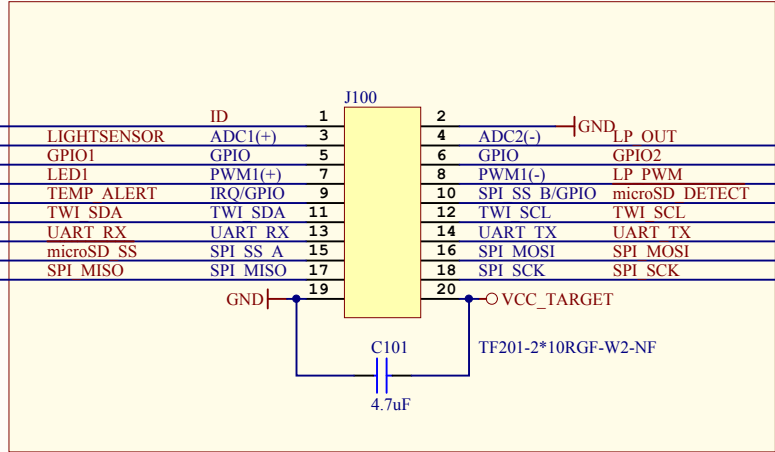
Light Sensor



Low Pass Filter



Standard Extension Header (Female)



LED1

TEMP ALERT

TWI SCL

TWI SDA

microSD_DETECT

microSD_SS

SPI MISO

SPI SCK

SPI MOSI

UART_RX

UART_TX

GPIO1

GPIO2

TWI

SCL

SDA

microSD_DETECT

microSD_SS

SPI

MISO

SCK

MOSI

UART_RX

UART_TX

GPIO1

GPIO2

GPIO1

GPIO2

VCC_TARGET


GND

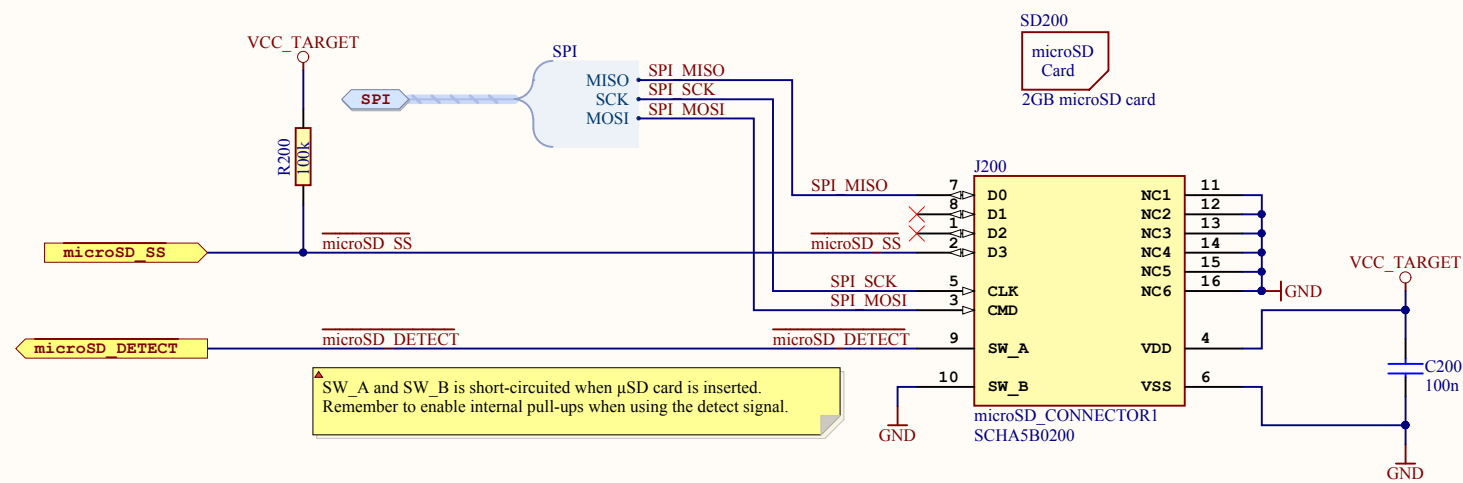
UART_TX and UART_RX refers to the target, e.g. UART_TX is connected to the UART_TX pin.


JS100 SNT-100-BK-G

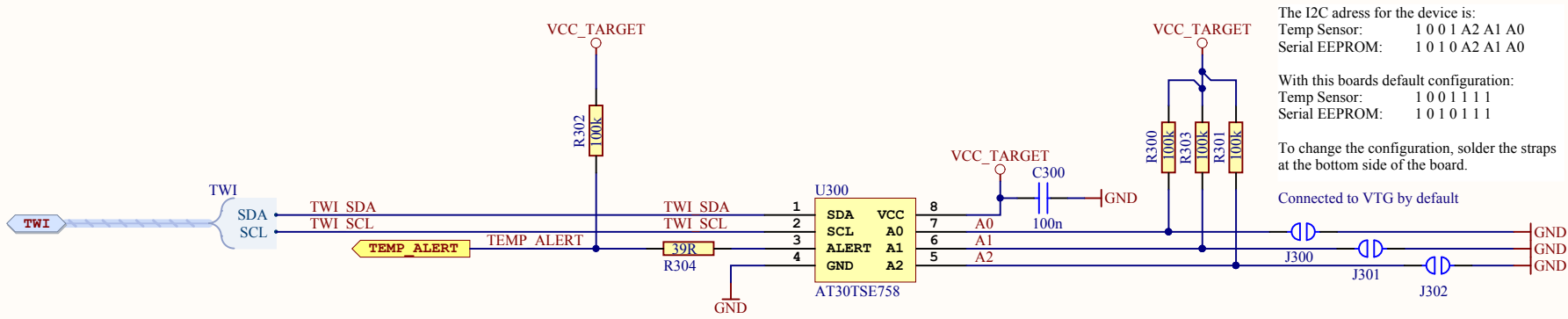
HEADER 1x2 HMTSW-102-23-F-S-237

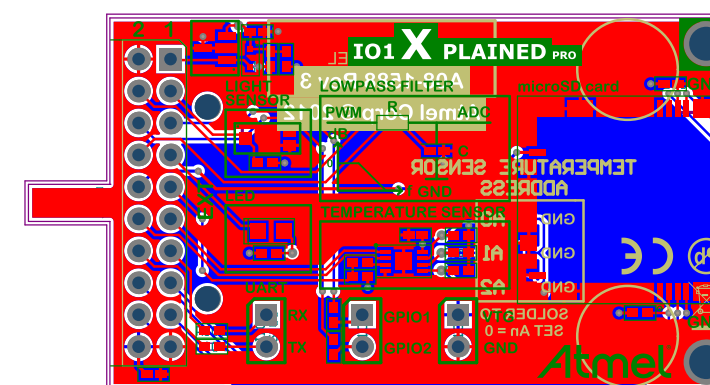
HEADER 1x2 HMTSW-102-23-F-S-237

ATMEL Norway		*	 Enabling Unlimited Possibilities		
Vestre Rosten 79		*			
N-7075 TILLER		*			
NORWAY					
Date:	28.09.2015	13:03:14	PAGE:	2 of 4	
Document number:	2		Revision:	3	
TITLE: Connector					
IO1_Xplained_Pro_Connector.SchDoc					

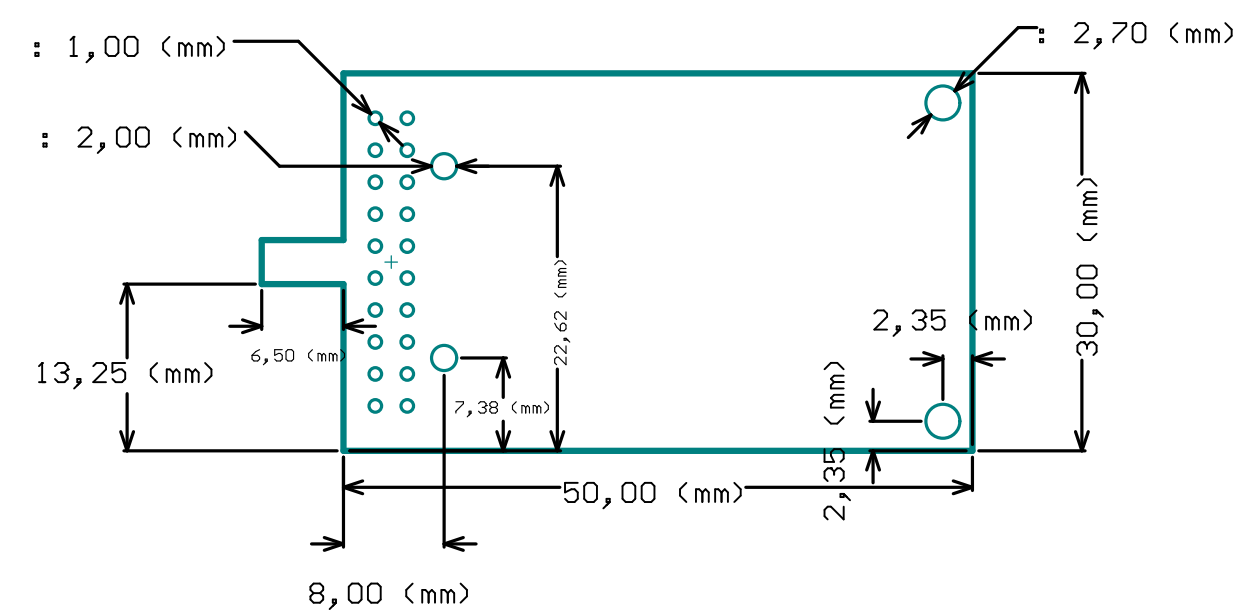


ATMEL Norway	*				
Vestre Rosten 79	*				
N-7075 TILLER	*				
NORWAY					
Date:	28.09.2015	13:03:14	PAGE:	3 of 4	
Document number:	3		Revision:	3	
TITLE: microSD card holder					
IO1_Xplained_Pro_microSD.SchDoc					

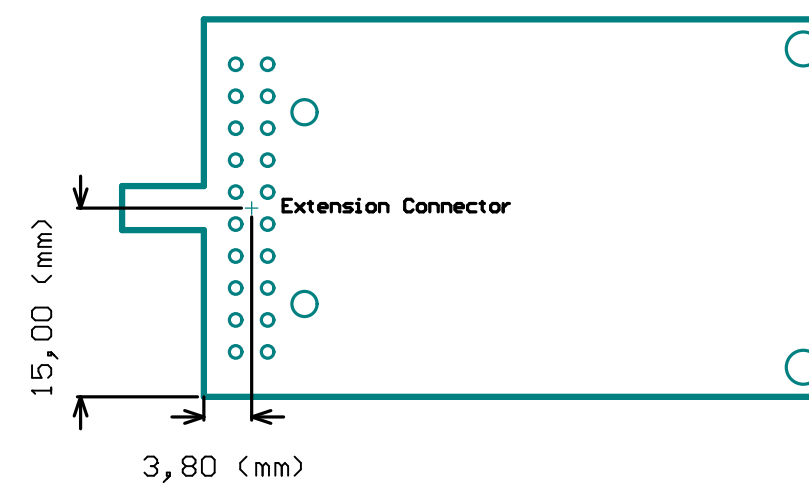




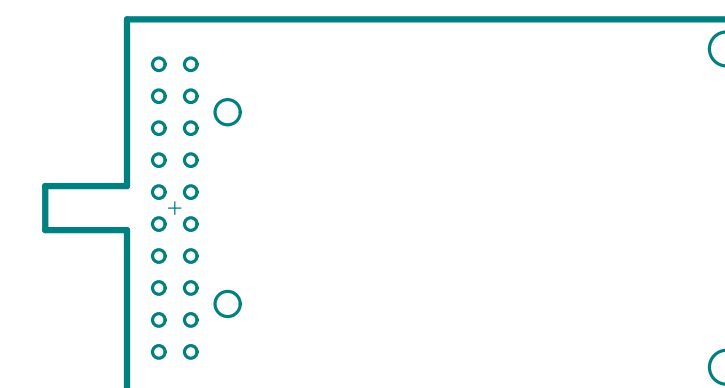
Mechanical Dimensions



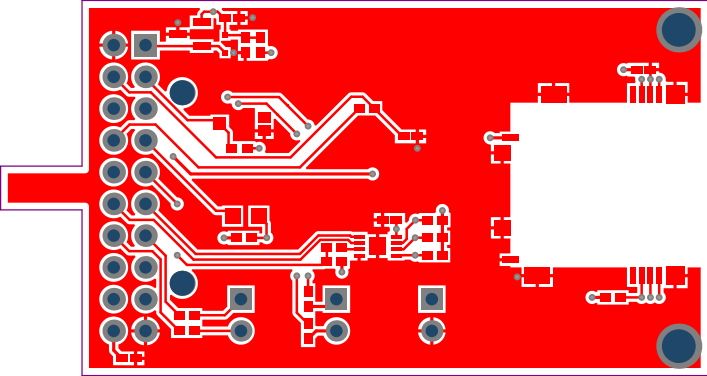
Connector Placement

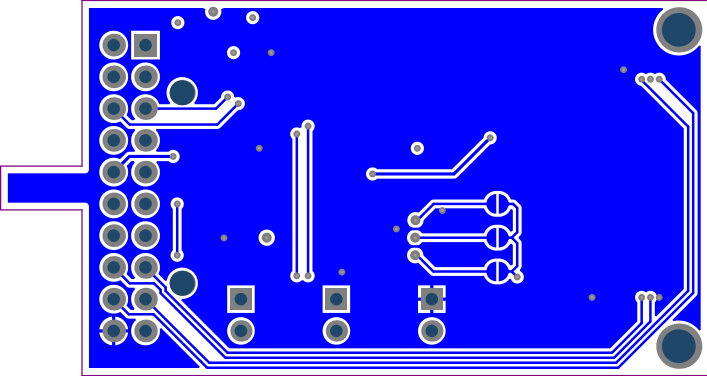


Testpoint Placement

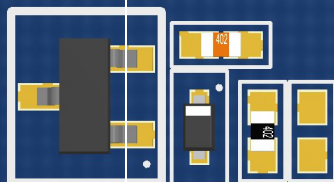
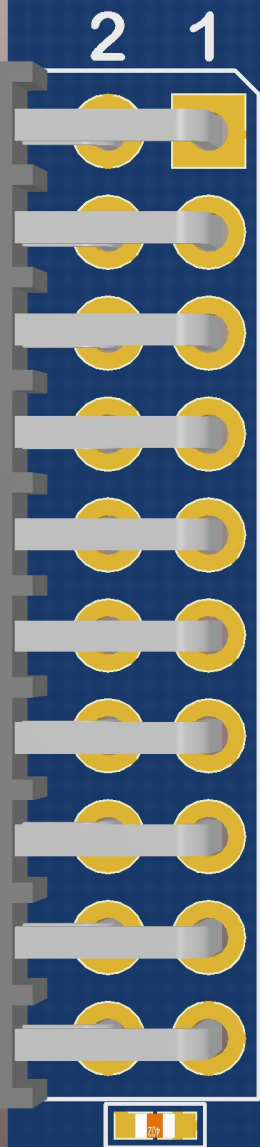


ENGINEER:	TITLE:		
PCB DESIGNER:			
DATE: 28.09.2015	PART NO:	REV:	
FILE NAME: I01_xjoined_ProPcbDoc	DWG NO:	SCALE:	

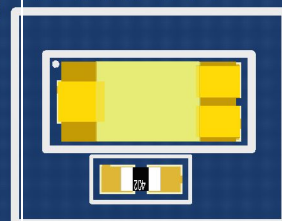




IO1 X PLAINED PRO

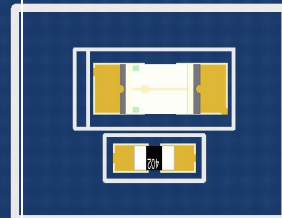


LIGHT
SENSOR

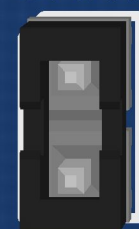


EXT

LED



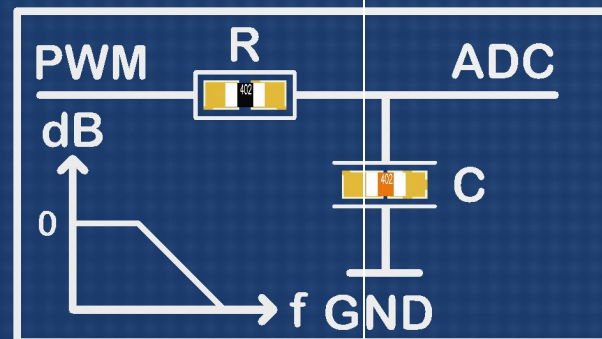
UART



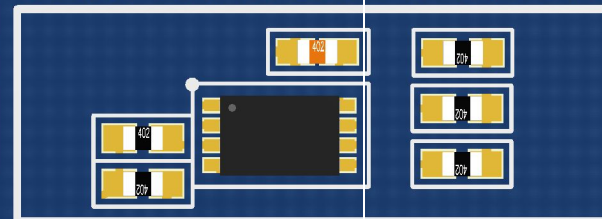
RX

TX

LOWPASS FILTER



TEMPERATURE SENSOR



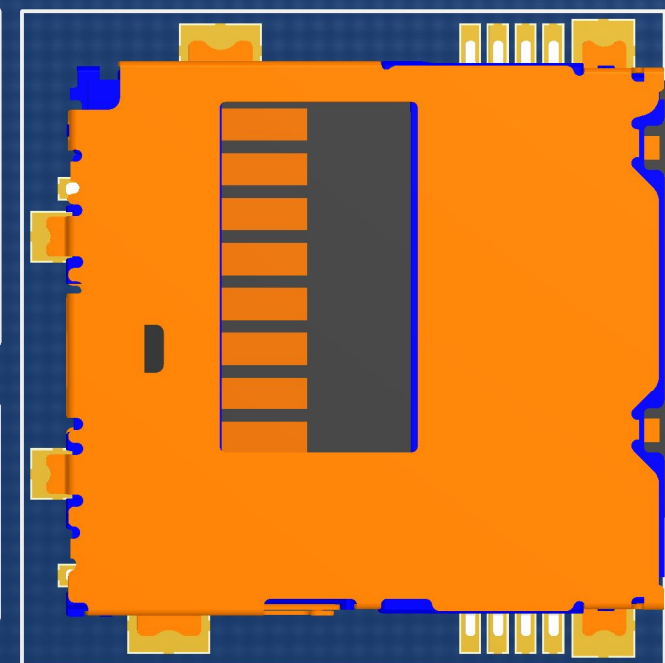
GPIO1

GPIO2

VTG

GND

microSD card



GND

GND

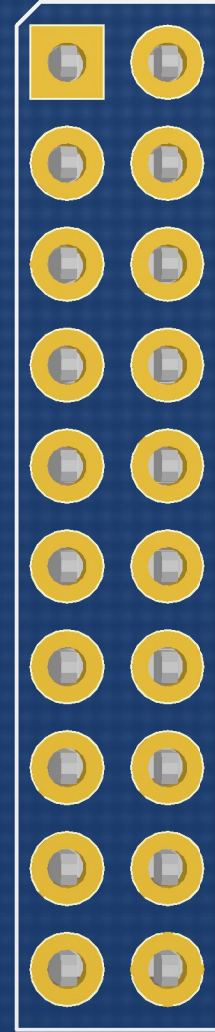
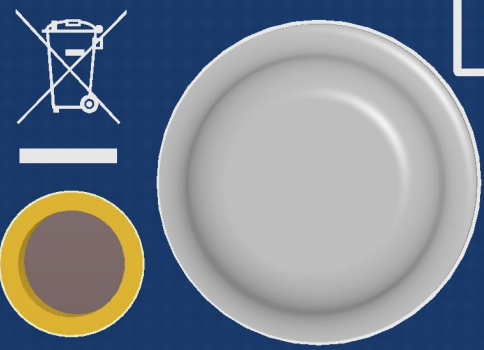
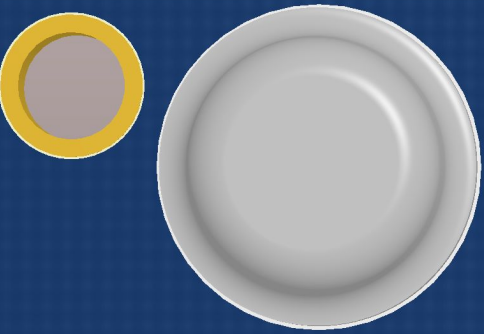
Atmel®

PCBA LABEL
A08-1588 Rev 3
Atmel Corp © 2012

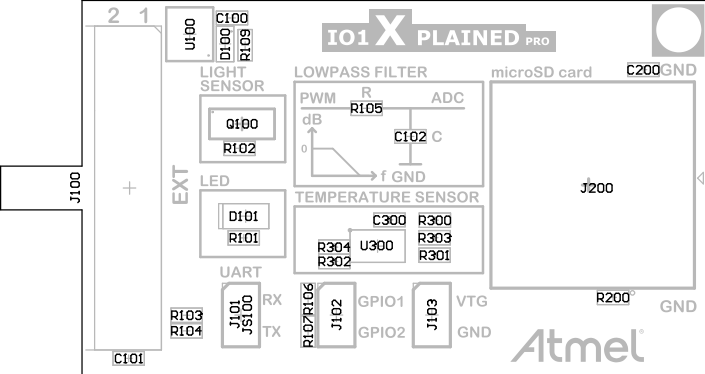
TEMPERATURE SENSOR
ADDRESS

GND	●	A0
GND	●	A1
GND	●	A2

SOLDER TO
SET $A_n = 0$



IO1 X PLAINED PRO



E1

PCB LABEL

A08-1588 Rev 3

Atmel Corp © 2012

TEMPERATURE SENSOR
ADDRESS

GNDJ300 A0

GNDJ301 A1

GNDJ302 A2

SOLDER TO
SET An = 0



E2

Component list

IO1 Xplained PRO

Source Data From:

IO1_Xplained_Pro.PrjPCB

Project:

IO1_Xplained_Pro.PrjPCB

Variant:

Default_assembly

Report Date: 28.09.2015 13:03:27

Print Date: 28.09.2015 13:00:28



Fitted	Designator	Quantity	Value	Manufacturer	MPN	Description
Fitted	C100, C101	2	4.7uF	tdk	C1005X5R0J475K	Ceramic capacitor, SMD 0402, X5R, 6.3V, +/-10%
Fitted	C102, C200, C300	3	100n	Kemet	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7R, 16V, +/-10%
Fitted	D100	1	BAT54XV2T1G	ON Semiconductor	BAT54XV2T1G	Schottky diode, If:200mA, Vf:0.35V, Vrrm:30V, SOD-523
Fitted	D101	1	EL17-21UYC/A2	Everlight	17-21UYC/S530-A3/TR8	LED, Yellow, Wave length=591nm, SMD 0805, ±70°
Fitted	DOC1	1	A09-1775 PCBA Files	ATMEL		IO1 Xplained PRO PCBA documentation
Fitted	E1, E2	2	SJ-5076	3M	SJ-5076	2.8mm adhesive feet, diam 8.0mm
Fitted	FIXTURE1	1	Xplained PRO Extension board Jupiter Test Fixture	ESCA TEC	Xplained PRO Extension board Jupiter Test Fixture	Xplained PRO Extension board Jupiter Test Fixture
Fitted	J100	1	TF201-2*10RGF-W2-NF	Pro-data International Corp	F201-2*10RGF-W2-NF	2x10, female pin header receptable, right-angled, 2.54mm pitch, THM, Pin In Paste
Fitted	J101, J102, J103	3	HMTSW-102-23-F-S-237	SAMTEC	HMTSW-102-23-F-S-237	1x2 pin header, 2.54mm pitch, Pin-in-Paste THM
Fitted	J200	1	SCHA5B0200	ALPS	SCHA5B0200	microSD memory card connector, push/push
Fitted	JS100	1	SNT-100-BK-G	SAMTEC	SNT-100-BK-G	Jumper cap for 2.54mm pinheader
Fitted	LABEL1	1	Label PCBA	ACT Logimark AS	505462	PCBA identification label PP Top White Gloss
Fitted	PCB1	1	A08-1588	ATMEL		IO1 Xplained PRO PCB, 2 layer, size 56.5mm x 30mm
Fitted	Q100	1	TEMT6000	vishay	TEMT6000	light sensor
Fitted	R101, R105	2	680R			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R102, R109, R200, R300, R301, R302, R303	7	100k			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	R103, R104, R106, R107, R304	5	39R			Thick film resistor, SMD 0402, 1/16W, 1%
Fitted	SD200	1	2GB microSD card		2GB microSD card	microSD card without adapters and case
Fitted	TEST1	1	IO1 Xplained PRO test	ATMEL		Fixture test for IO1 Xplained PRO
Fitted	U100	1	ATSHA204 SWI SOT23-3	ATMEL	ATSHA204-TSU-T	ATSHA204 with 1-wire interface and SOT23-3 package
Fitted	U300	1	AT30TSE758	ATMEL	AT30TSE758-MA8-T	SINGLE DIGITAL TEMPERATURE SENSOR W/ SERIAL EEPROM, UDFN8
Not Fitted	R100	0	0R			Thick film resistor, SMD 0402, 1/16W, 1%

38

Approved

Notes