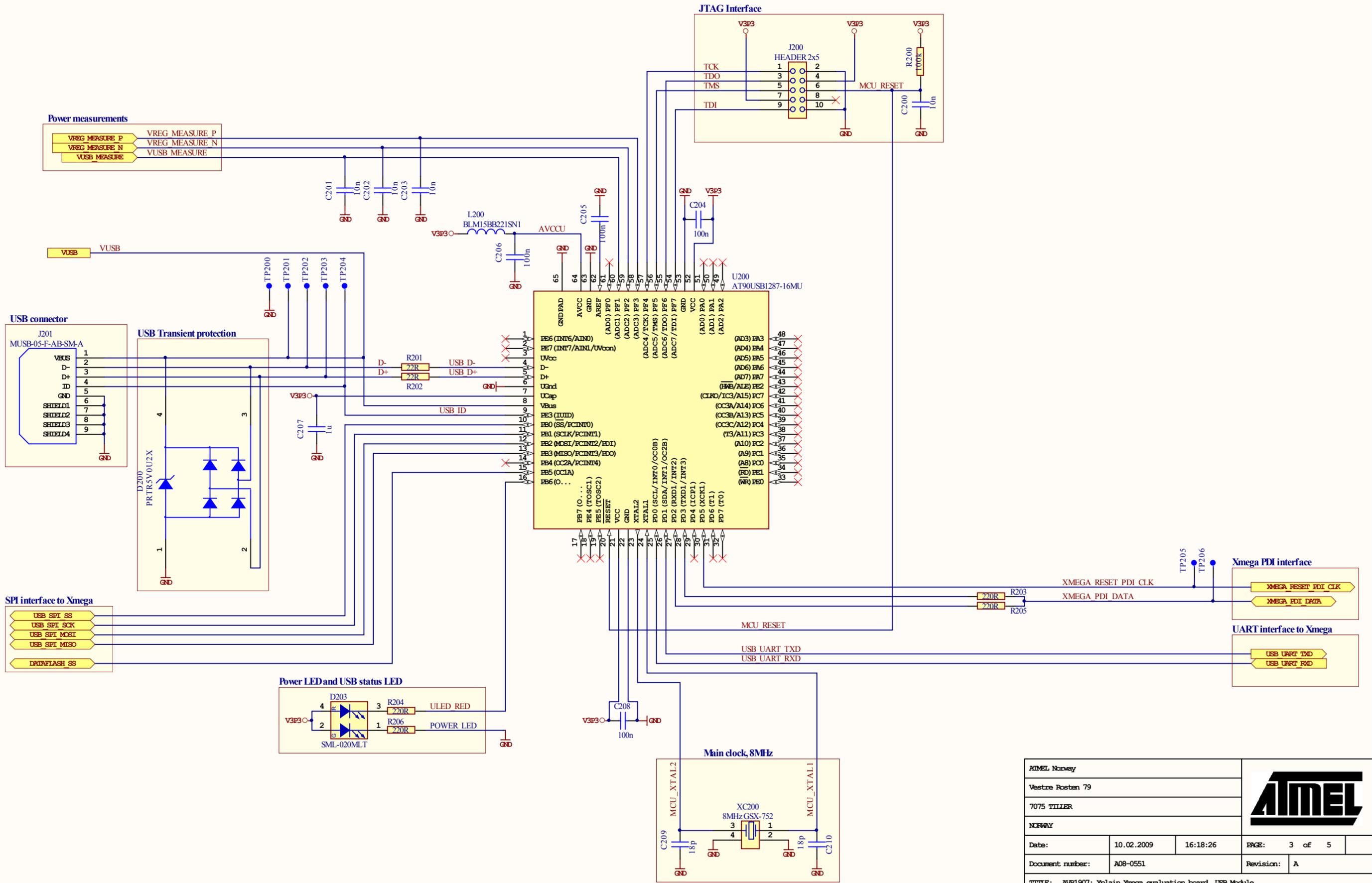
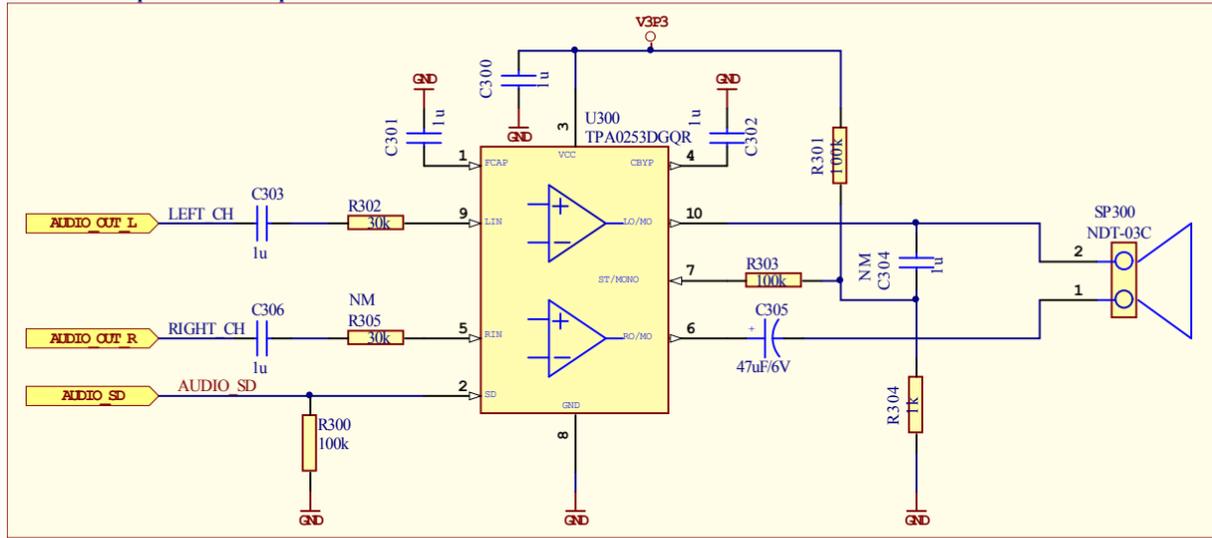


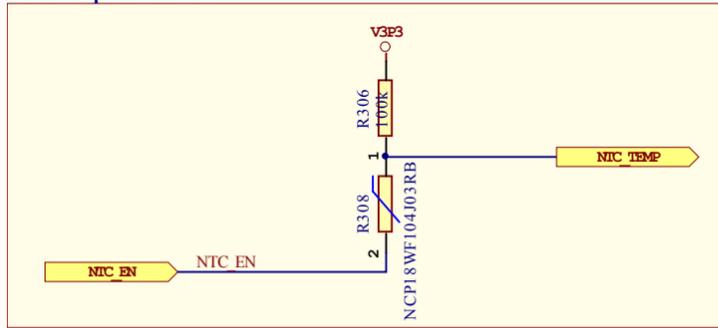
ATMEL Norway					
Vestre Rosten 79					
7075 TILLER					
NORWAY					
Date:	10.02.2009	16:18:26	PAGE:	1 of 5	
Document number:	A08-0551		Revision:	A	
TITLE: AVR1907: Xplain evaluation board, Top-Level					
Xplain_2.SchDoc					



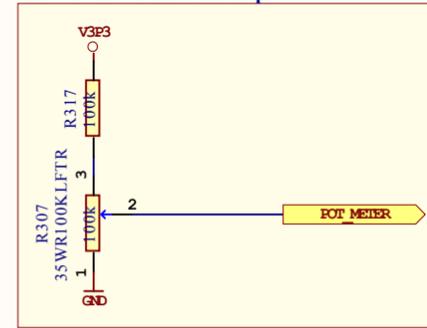
Mono audio output with onboard speaker



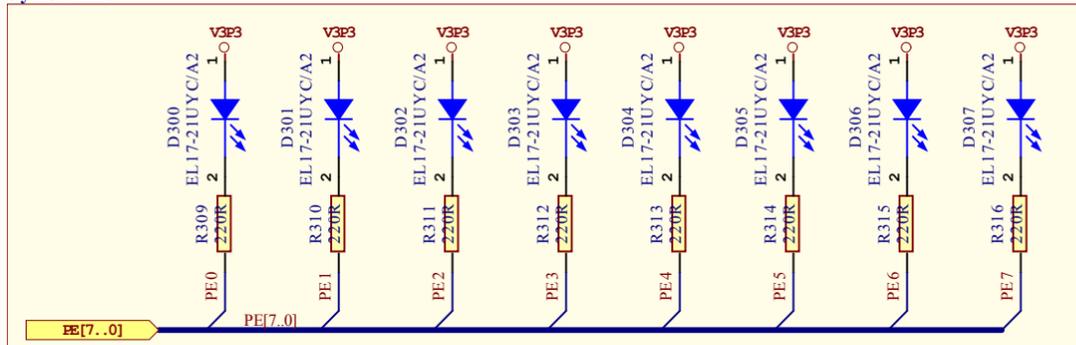
NTC Temperature sensor



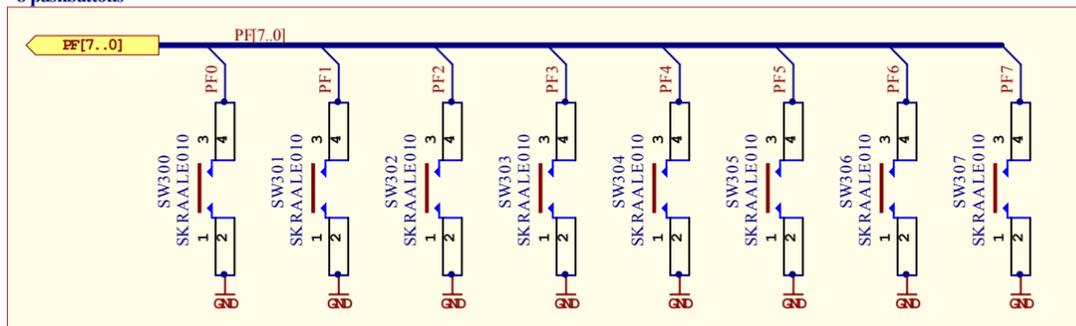
Potentiometer for 0V - 2.0V output



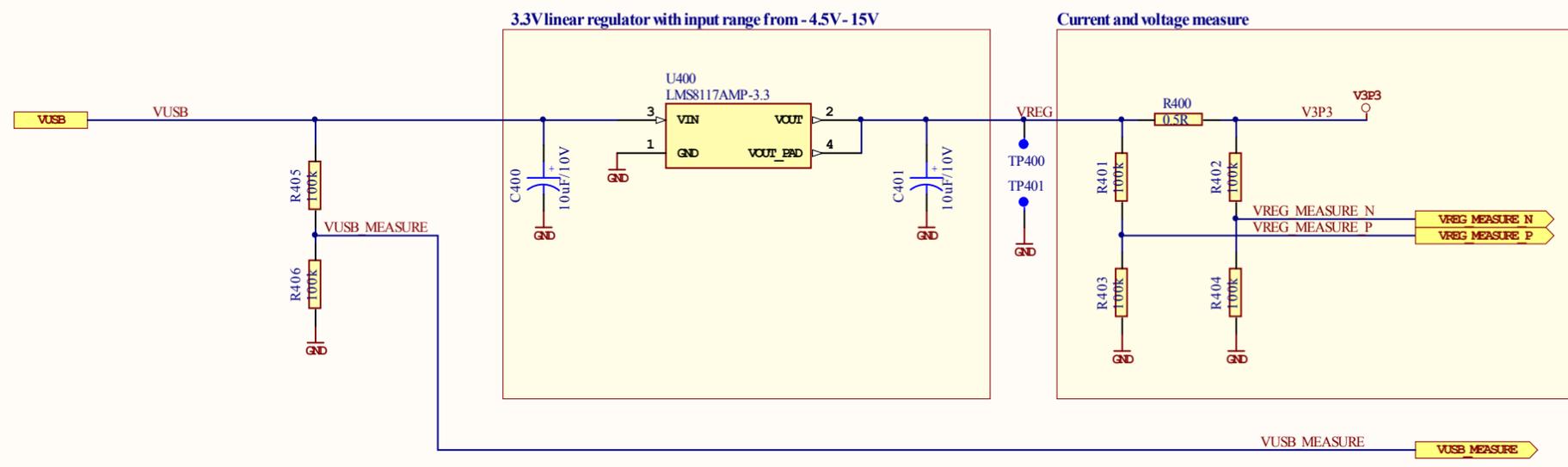
8 yellow LEDs



8 pushbuttons

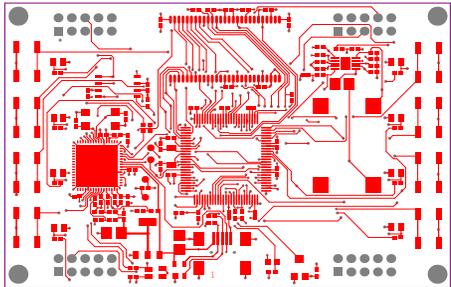


ATMEL Norway			
Vestre Rosten 79			
7075 TILLER		PAGE: 4 of 5	
NORWAY		Revision: A	
Date:	10.02.2009	16:18:26	
Document number:	A08-0551		
TITLE: AVR1907: Xplain Mega evaluation board, IO Module			
Xplain_2_IO.SchDoc			



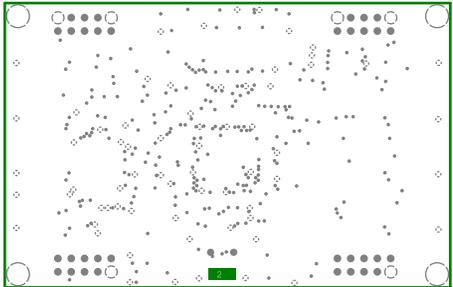
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7075 TILLER			
NORWAY			
Date:	10.02.2009	16:18:26	PAGE: 5 of 5
Document number:	A08-0551		Revision: A
TITLE: AVR1907: Xplain evaluation board, Power-Supply Module			
Xplain_2_PSU.SchDoc			

Quantity	Designator	MPN	Description	Value	Manufacturer
1	C100		Ceramic capacitor, SMD 0402, NF 50V, +/-5%	22p	
22	C101, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C204, C205, C206, C208	C0402C104K4RACTU	Ceramic capacitor, SMD 0402, X7 16V, +/-10%	100n	Kemet
3	C102, C209, C210		Ceramic capacitor, SMD 0402, NF 50V, +/-5%	18p	
4	C200, C201, C202, C203		Ceramic capacitor, SMD 0402, X7 25V, +/-10%	10n	
6	C207, C300, C301, C302, C303, C306	C0402C105K9PAC	Ceramic capacitor, SMD 0402, X5 6.3V, +/-10%	1u	Kemet
1	C305	T494B476M006AT	SMD tantalum capacitor, precision molded chip, ESR=0,5	47uF/6V	Kemet
2	C400, C401	T491B106M010AT	SMD tantalum capacitor, precision molded chip. ESR = 3,5	10uF/10V	Kemet
1	D200	PRTR5V0U2X	Double rail-to-rail USB ESD protection diode	PRTR5V0U2X	Philips
1	D203	SML-020MLT	LED, 2 colour (RED/GREEN), transparent clear lens, SMD	SML-020MLT	ROHM
8	D300, D301, D302, D303, D304, D305, D306, D307	EL17-21UYC/A2	LED, Yellow, Wave length=591nm SMD0805 ±70°	EL17-21UYC/A2	Everlight
4	J100, J101, J102, J200	CD075014 2X5	2x5 pin header, 2.54 mm pitch, Pin-in-Paste THM	CD075014 2X5	Freber
1	J201	MUSB-05-F-AB-SM-A		MUSB-05-F-AB-SM-A	SAMTEC
2	JS100, JS101	SNT-100-BK-G	Jumper cap for 2.54mm pinheader	SNT-100-BK-G	SAMTEC
2	L100, L200	BLM15BB221SN1	SMD RF inductor 0402. Z=220Ohm (@100MHz), Max R(dc)=0.80Ohm Max current=200mA	BLM15BB221SN1	Murata
1	LBL1		PCBA identification label PP Top White Gloss	Label PCBA	
1	PCB1	A08-0551	Xplain PCB, 4-layer, size 54mm x 85mm	A08-0551	
19	R100, R101, R102, R103, R104, R125, R126, R200, R300, R301, R303, R306, R317, R401, R402, R403, R404, R405, R406		Thick film resistor, SMD 0402, 1/16W, 1%	100k	
1	R105		Thick film resistor, SMD 0402, 1/16W, 1%	0R	
2	R201, R202		Thick film resistor, SMD 0402, 1/16W, 1%	22R	
12	R203, R204, R205, R206, R309, R310, R311, R312, R313, R314, R315, R316		Thick film resistor, SMD 0402, 1/16W, 1%	220R	
1	R302		Thick film resistor, SMD 0402, 1/16W, 1%	30k	
1	R304		Thick film resistor, SMD 0402, 1/16W, 1%	1k	
1	R307	35WR100KLFTR	3mm single-turn SMD potmeter	35WR100KLFTR	BI Technologies
1	R308	NCP18WF104J03RB	NTC Thermistor 100kOhm @ 25deg, 1/10W, 5%, SMD 0603	NCP18WF104J03RB	Murata
1	R400	LRCS0402-0R5FT5	Thick film resistor, SMD 0402, 1/16W, 1%	0.5R	Welwyn
1	SP300	NDT-03C	SMD Speaker, 0.5W, 15x15mm	NDT-03C	Star Micronics
8	SW300, SW301, SW302, SW303, SW304, SW305, SW306, SW307	SKRAALE010	6.2x6.2 mm SMD tact switch	SKRAALE010	ALPS
1	U100	ATxmega128A1-AU	AVR 8-bit RISC MCU	ATxmega128A1-AU	ATMEL
1	U101	MT48LC16M4A2P-75:G	64Mbit SDRAM 16Mx4, 3.3V.	MT48LC16M4A2P-75:G	Micron
1	U102	AT45DB642D-CNU	64-Mbit 2.7-volt serial data	AT45DB642D-CNU	ATMEL
1	U200	AT90USB1287-16MU		AT90USB1287-16MU	ATMEL
1	U300	TPA0253DGQR	1W mono audio power amplifier w headphone drive	TPA0253DGQR	Texas Instruments
1	U400	LMS8117AMP-3.3	3.3V 1A Low Dropout Linear Regulator SOT223_4	LMS8117AMP-3.3	National Semiconductor
1	XC100	Q13FC1450000614	32kHz crystal, SMD, 4.1 x 1.5 mm FC-145	Q13FC1450000614	Epson Toyocom
1	XC200	GSX-752B/551EF 8MHz		8MHz GSX-752	Golledge



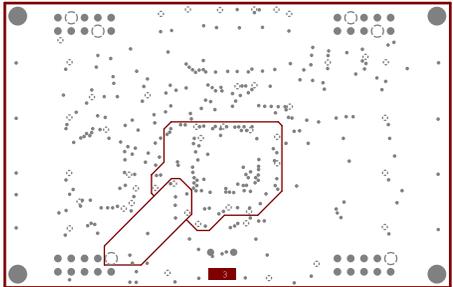
ATMEL, HIGHWAY
1000, AVENUE 70
SUNNYVALE, CA 95086

DESIGNER:	TITLE:		
PCB DESIGNER:	PART NO.:		REV.:
DATE:	10.02.2009	DWG NO.:	SCALE:
FILE NAME:	1999_274004		



ATMEL, NORWAY
Varehus Plassen 7B
N-2075 Skjetten

DESIGNER	TITLE		
PCB DESIGNER	PART NO.		REV.
DATE	10.02.2009	DWG NO.	SCALE
FILE NAME	1908_274004		



ATMEL, HIGHWAY
MARK PLACE 79
N. 70TH ST

DESIGNER	TITLE		
PCB DESIGNER	PART NO.		REV.
DATE	DWG NO.		SCALE
10.03.2009			
FILE NAME			
1909_274004			

1 2 3 4 5 6 7 8

A

A

B

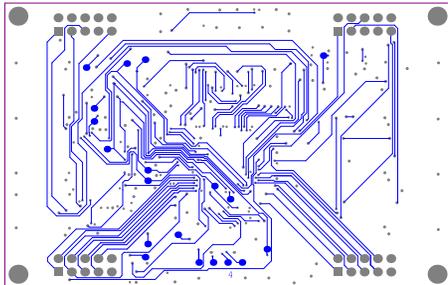
B

C

C

D

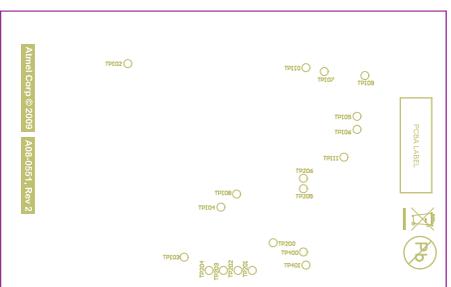
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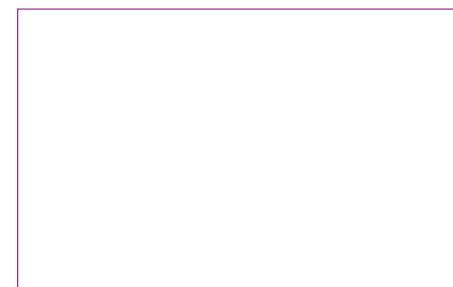


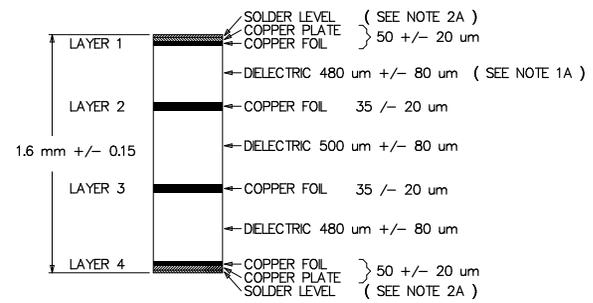
ATMEL, HIGHWAY
 36000 Via
 San Jose, CA 95134

DESIGNER:	TITLE:		
PCB DESIGNER:			
DATE:	PART NO.:	REV.:	
10.03.2009			
FILE NAME:	DWG NO.:	SCALE:	
1999_274004			

5 6 7 8







NOTE 1A: DIELECTRIC FR4
 2A: SURFACE PROTECTION: HASL
 THE BOARD MUST BE RoHS COMPLIANT

DETAIL A (CROSS-SECTION)
 SCALE = NONE

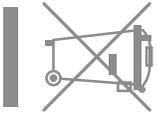
85 (mm)



54 (mm)

 ATMEL, HOLBURY Wafer Fusion 78 H-7878 3Rev	DOKUMENT PCB DESIGNER	TITEL	
	DATE: 10.02.2009	PART NO.	REV.
FILE NAME: 1999_274004	DWG NO.	SCALE	

PCBA LABEL



TP109

TP105

TP106

TP107

TP111

TP206

TP205

TP110

TP108

TP104

TP200

TP400

TP401

TP103

TP204

TP203

TP202

TP201

TP102