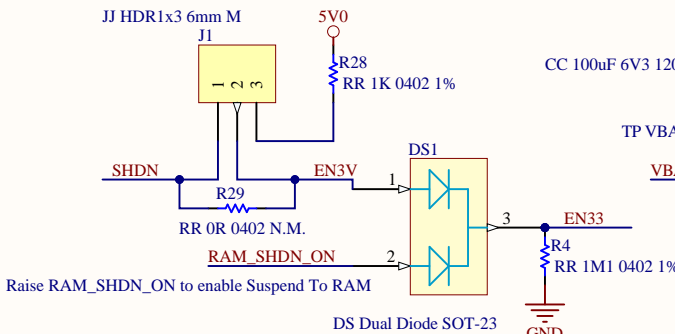
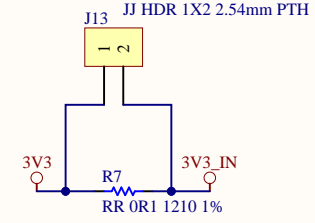
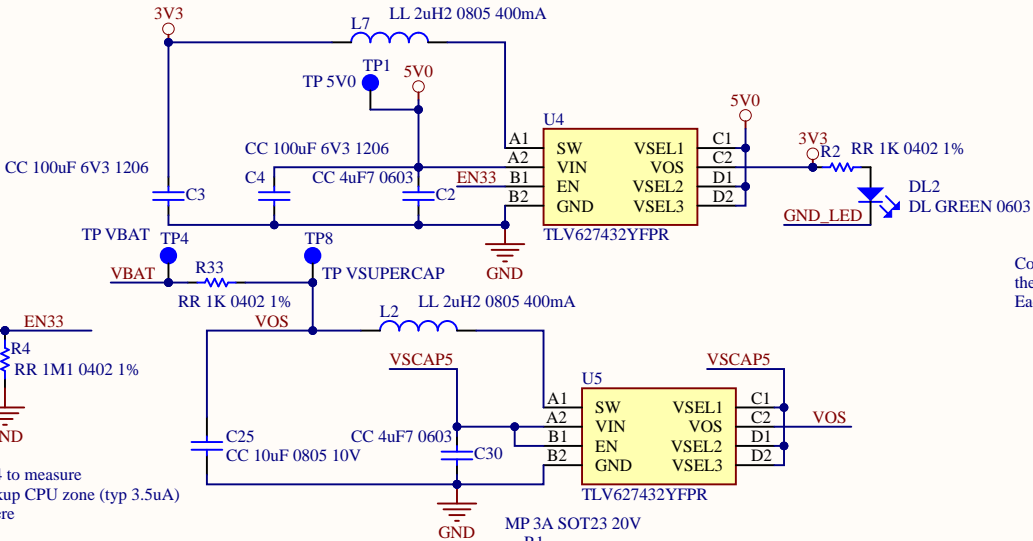


1-2 3V3 Power Regulator subject to SHDN status  
 2-3 3V3 Power Regulator always ON for Suspend To RAM

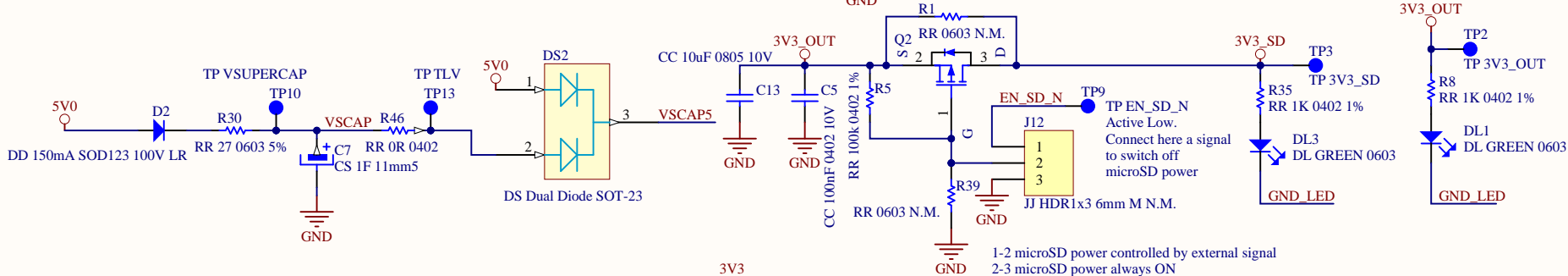


Raise RAM\_SHDN\_ON to enable Suspend To RAM

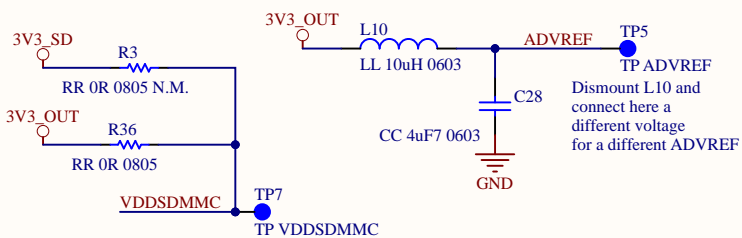
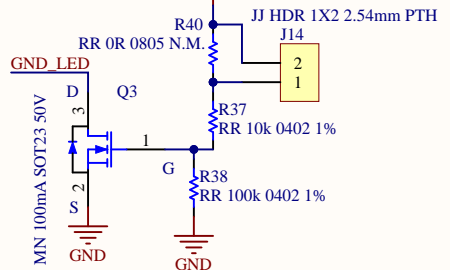
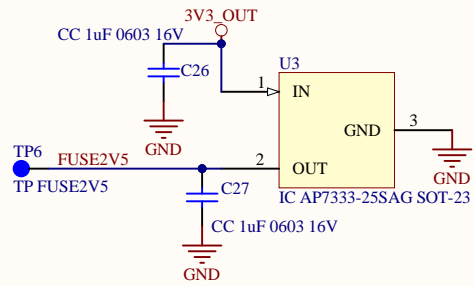
Connect a voltmeter between TP8 and TP4 to measure the current consumption of the VBAT backup CPU zone (typ 3.5uA) each millivolt corresponds to 1 microampere



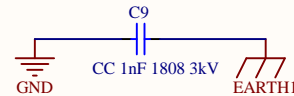
Connect a voltmeter on J13 to measure the current consumption of the RoadRunner on 3V3 Each millivolt corresponds to 10 milliampere



1-2 microSD power controlled by external signal  
 2-3 microSD power always ON



VDDSDMMC powers many CPU pins. Decide here if powering them off when you switch off microSD



ClassName: EARTH

Title <b>BertaD2 Power</b>			ACME Systems srl
Size: A4	Number:	Revision: 1.2	www.acmesystems.it
Date: 19/04/2023	Time: 18:53:01	Sheet 3 of 3	
File: E:\test\Seafile\Progetti\Amedeo\BertaD2_1_2_2\BertaD2_POWER_1_2.SchDoc			



Component	Description	Designator	Footprint	Label	Quantity
TP ETH_CLK	Test Point	Z5 4MHz	TP.PTH	TP TEST POINT	1
ACME Board					
RoadRunner		AB RoadRunner	AB RoadRunner	AB RoadRunner	1
CC 1004F 0402 10V	Capacitor, Multi Layer Ceramic	C1, C3, C14, C15, C16, C18	CC 04025 1005m SOLDER	CC Ceramic Capacitor CC Ceramic	4
CC 4uF 10603	Capacitor, Multi Layer Ceramic	C2, C28, C29, C30	CC 0603 (1608 metric)	CC Ceramic Capacitor CC Ceramic	4
CC 1004F AV3 1206	Capacitor, Multi Layer Ceramic	C3, C4	CC 1206S5 (3216 metric)	CC Ceramic Capacitor	2
CC 104F 1808 3W	Capacitor, Multi Layer Ceramic	C6, C9	CC 1808 (4520 metric)	CC Ceramic Capacitor	2
CS 1F 11mm5	Electrolytic Capacitor	C7	Supercap A02 Bx16x18	CE Supercap	1
CC 1004F AV3 1206	Capacitor, Multi Layer Ceramic	C8	CC 1206 (3216 metric)	CC Ceramic Capacitor	1
CC 4uF 1206 10V	Capacitor, Multi Layer Ceramic	C10, C11	CC 1206 (3216 metric)	CC Ceramic Capacitor	2
CC 10uF 0805 10V	Capacitor, Multi Layer Ceramic	C12, C13, C25	CC 0805 (2012 metric)	CC Ceramic Capacitor CC Ceramic	3
CC 1uF 0603 16V	Capacitor, Multi Layer Ceramic	C17	CC 0603 (2012 metric)	CC Ceramic	1
CC 33pF 0402	Capacitor, Multi Layer Ceramic	C19	CC 04025 1005m SOLDER	CC Ceramic	1
CC 22pF 0402	Capacitor, Multi Layer Ceramic	C20	CC 04025 1005m SOLDER	CC Ceramic	1
CC 18pF 0402 N.M.	Capacitor, Multi Layer Ceramic	C21	CC 04025 1005m SOLDER	CC Ceramic	1
CC 1uF 0603 16V	Capacitor, Multi Layer Ceramic	C22, C26, C27	CC 0603 (1608 metric)	CC Ceramic	3
CC 470pF 0402	Capacitor, Multi Layer Ceramic	C23	CC 04025 1005m SOLDER	CC Ceramic	1
CC 10uF 0805 10V	Capacitor, Multi Layer Ceramic	C24	CC 1206 (3216 metric)	CC Ceramic	1
D2 100mA 0603 30V	Schottky Diode	D1	DD 0603	D2 Schottky Diode	1
DD 150mA SMD123 50V LR	Normal Diode	D2	DD SMD123	DD Silicon Diode	1
DL GREEN 0603	LED Light-emitting diode	DL1, DL2, DL3	DL 0603 (1608 metric) GREEN	DL LED	3
DS Dual Diode SOT-23		DS1, DS2	SOT23 for RBLML402	DS DualDiodeC/MCAT	2
FU MF-ARMF110 4532	Bourne Fuse	F1	FU 1812 (4532 metric)	FUSE SMD	1
FF ACME		FF 1, FF2, FF3, FF4	Fiducial 1mm, small	FF ACME	4
J1 HDR1x3 6mm M	Header, 3 Pin Dual Mount Female 20mm	J1	HDR 1x3	J1 HDR 1x3 2.54mm	1
J1 HDR 1x2 2.54mm PTH	Header, 2 Pin Dual Mount Female 20mm	J2	HDR 1x2	J1 HDR 1x2	1
J1 HDR20x20M SMD F N.M.	Header 20x2 SMD Female reverse mount	J3, J4, J5, J6	HDR20x20 SMD Female	J1 HDR20x20M SMD F	4
J1 USB A VHS190 PTH	USB 2.0 Type A	J7	USB 2.0 44-103 101	J2 USB A	1
J1 USB Micro SMD with legs	USB Micro B 19pin with legs	J8	USB AMPHINEXT_1011811 4.00013F	J1 USB Micro SMD_WLEGS	1
J1 HDR 1x2 2.54mm PTH N.M.	Header, 2 Pin Dual Mount Female 20mm	J9	HDR1X2 NAKED	J1 HDR1X2	1
J1 HDR1x6 6mm M	Header, 6 Pin Male form	J10	HDR1x6_3D	J1 HDR1x6 6mm M	1
J1 RIL20607C1	ETH connector RIL20607C1 TAMMAG	J11	RIL20607C1	J1 RIL20607C1 ETH	1
J1 HDR1x3 6mm M N.M.	Header, 3 Pin Dual Mount Female 20mm	J12	HDR 1x3	J1 HDR 1x3 2.54mm	1
J1 HDR 1x2 2.54mm PTH	Header, 2 Pin Dual Mount Female 20mm	J13, J14, J15, J16	HDR1X2 NAKED	J1 HDR1X2	4
LE 221 0603 1.5A	Ferrite Ferrite 220 Ohm 2A 0603	L1, L3, L4, L4, L8	LL 0603 (1608 metric)	LE Ferrite	4
LL 3uH 0805 400mA	Power Inductor 2uH 0805	L2, L7	LL 0805 (2012 metric)	LL Inductor	2
LL 12V 0603 1.5A	Ferrite 120 Ohm 0603	L9	LL 0603 (1608 metric)	LL Ferrite	1
LL 10uH 0603	Power Inductor	L10	LL 0603 (1608 metric)	LL Inductor	1
LC 90 150mA 0504	Common Mode Choke Coil EMI Type	LC1, LC3	LC 0504 (1210 metric)	LC Choke	2
RC 27 0603 5%	Ferrite 220 Ohm 2A 0805	RC4	LC 0603 (1608 metric)	LC EMI Filter	1
SW KTH13050	SWITCH TACT 6MM 160CF H=4.3MM	P1, P2	PULSANTE SMD S	SW KTH13050	2
MP 3A SOT23 20V	3AP, Channel Logic MOSFET SOT23	Q1	SOT23 for RBLML402	MP 3A SOT23 20V	1
MP 3A SOT23 20V	3AP, Channel Logic MOSFET SOT23	Q2	SOT23 for HighCurrent	MP 3A SOT23 20V	1
MN 100mA SOT23 50V	100mA N Channel Logic MOSFET SOT23	Q3	SOT23 for RBLML402	MN 100mA SOT23 50V	1
RR 0603 N.M.	Resistor	RR1, RR10, RR9	RR 0603 (1608 metric)	RR Resistor	3
RR 1K 0402 1%	Resistor	RR2, RR, RR9, RR20, RR21, RR24, RR30, RR34, RR35	RR 04025S 1005m SOLDER	RR Resistor	10
RR 0R 0805 N.M.	Resistor	RR3, RR9, RR40	RR 0805 (2012 metric)	RR Resistor	3
RR 1M1 0402 1%	Resistor	RR4	RR 04025S 1005m SOLDER	RR Resistor	1
RR 100K 0402 1%	Resistor	RR5, RR11, RR38, RR43	RR 04025S 1005m SOLDER	RR Resistor	4
RR 47k 0402 1%	Resistor	RR6	RR 04025S 1005m SOLDER	RR Resistor	1
RR 0R1 1210 1%	Resistor	RR7, RR42	RR 1210 (2225 metric)	RR Resistor	2
RR 0R 0805	Resistor	RR12, RR36	RR 0805 (2012 metric)	RR Resistor	2
RR 1K5 0402 1%	Resistor	RR13	RR 04025S 1005m SOLDER	RR Resistor	1
RR 0402 N.M.	Resistor	RR14	RR 04025S 1005m SOLDER	RR Resistor	1
RR 4990 0402 1%	Resistor	RR15, RR16, RR17, RR18	RR 04025S 1005m SOLDER	RR Resistor	4
RR 10k 0402 1%	Resistor	RR22, RR23, RR41	RR 04025S 1005m SOLDER	RR Resistor	3
RR 12k 1 0402 1%	Resistor	RR23	RR 04025S 1005m SOLDER	RR Resistor	1
RR 39R 0402 1%	Resistor	RR24	RR 04025S 1005m SOLDER	RR Resistor	1
RR 68k 0402 1%	Resistor	RR25, RR26	RR 04025S 1005m SOLDER	RR Resistor	2
RR 10k 0402 5%	Resistor	RR27	RR 04025S 1005m SOLDER	RR Resistor	1
RR 0R 0402 N.M.	Resistor	RR29, RR45	RR 04025S 1005m SOLDER	RR Resistor	2
RR 27 0603 5%	Resistor	RR30	RR 0805 (2012 metric)	RR Resistor	1
RR 4k7 0402 1%	Resistor	RR31, RR32	RR 04025S 1005m SOLDER	RR Resistor	2
RR 0R 0402	Resistor	RR46	RR 04025S 1005m SOLDER	RR Resistor	1
TP SMD	Test Point	TP1	TP.PTH	TP TEST POINT	1
TP XYZ_OUT	Test Point	TP2	TP.PTH	TP TEST POINT	1
TP XYZ_SD	Test Point	TP3	TP.PTH	TP TEST POINT	1
TP VBAT	Test Point	TP4	TP.PTH	TP TEST POINT	1
TP ADREF	Test Point	TP5	TP.PTH	TP TEST POINT	1
TP FUSE_ZUS	Test Point	TP6	TP.PTH	TP TEST POINT	1
TP FUSE_SMD	Test Point	TP7	TP.PTH	TP TEST POINT	1
TP VSD3V3CAP	Test Point	TP8, TP10	TP.PTH	TP TEST POINT	2
TP EN_NL_N	Test Point	TP9	TP.PTH	TP TEST POINT	1
TP ENABLE_ETH	Test Point	TP11	TP.PTH	TP TEST POINT	1
TP XYZ_ETH	Test Point	TP12	TP.PTH	TP TEST POINT	1
TP ILV	Test Point	TP13	TP.PTH	TP TEST POINT	1
GC CM3024		U1	GC CM3024	GC CM3024	1
GC LAN8720M CP-18		U2	GC LAN8720 - 4x4mm	GC LAN8720	1
IC AP7233-2504G SOT-23	LDO Regulator SOT 23	U3	SOT23 generic	AP7233	1
TLV62742Y9FR	Integrated Circuit	U4, U5	SGMICR2P2XK_B7X15 1405	TLV62742Y9FR	2
II microSD huge small SMD		S0	microSD huge 32 G	microSD huge	1
XT 25A00 CS125		X1	XT 09M, LCC 3.2x5.8	XT QUAD	1