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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Specifications:

- a. Texas Instruments® Stara™AM3358 Processor (Integrated in the OSD3358-SM):
 - i. 1GHz ARM® Cortex-A8 with NEON floating-point accelerator
 - ii. SGX530 graphics accelerator
 - iii. 2x programmable real-time unit (PRU) 32-bit 200MHz microcontrollers with single-cycle I/ O latency
 - iv. ARM® Cortex-M3 for power and security management functions
- b. Memory:
 - i. 512MB DDR3 800MHZ RAM (Integrated in the OSD3358-SM)
 - ii. 4kB I2C EEPROM (Integrated in the OSD3358-SM)
 - iii. SD/ MMC Connector for microSD
- c. Software Compatibility
 - i. Debian GNU/ Linux images customized for BeagleBone
 - ii. Cloud9 IDE on Node.js w/ BoneScript library
 - iii. Any BeagleBone Black software not needing access to unavailable expansion pins
- d. Connectivity
 - i. High speed USB 2.0 OTG (host/ client) micro-B connector (USB0)
 - ii. Bootable microSD card slot (MMC0)
- e. Expansion header
 - i. High speed USB 2.0 OTG (host/ client) control signals (USB1)
 - ii. 8 analog inputs with 6 at 1.8V and 2 at 3.3V along with 1.8V voltage references
 - iii. 44 digital GPIOs accessible with 18 enabled by default including 2 shared with the 3.3V analog input pins
 - iv. 3 UARTs accessible with 2 enabled by default (UART0, UART4)
 - v. 2 I2C busses enabled by default (I2C1, I2C2)
 - vi. 2 SPI busses with single chip selects enabled by default (SPI0, SPI1)
 - vii. 4 PWM outputs accessible with 2 enabled by default (PWM0A, PWM1A)
 - viii. 2 quadrature encoder inputs accessible
 - ix. 2 CAN bus controllers accessible
 - x. 23 programmable real-time unit (PRU) 32-bit microcontroller I/ O pins including options for the PRU UART and eCAP accessible with 7 I/ O pins enabled by default for PRU0 and 1 enabled by default for PRU1

- xi. 3 voltage inputs with 1 for battery, 1 shared with the USB connector and 1 for power-line input and a battery temperature sense input
 - xii. 2 voltage outputs, 1 with a 3.3V LDO and 1 with switch from voltage input
 - xiii. Power and reset button I/ Os
- f. Power management:
 - i. TPS65217C PMIC is used along with a separate LDO to provide power to the system (Integrated in the OSD3358) with integrated 1-cell LiPo battery support
 - g. Debug Support:
 - i. JTAG test points
 - ii. gdb and other monitor-mode debug possible
 - h. Power Source
 - i. microUSB connector
 - ii. expansion header (3 options: battery, VIN or USB-VIN)
 - i. User Input / Output
 - i. Power Button with press detection interrupt via TPS65217C PMIC (hold for 10s to initiate hardware power cycle)

PocketBeagle Expansion Headers

P1														
		SYS	VIN	1	2	87			6	AIN 3.3V	9			
USB1	V_EN	GPIO	109	3	4	89					11	PRU1		
USB1			VBUS	5	6	5	GPIO		CS	SPIO		TX	PRU	
			VIN	7	8	2			RX			UART2		
			DN	9	10	3			MISO			TX	UART2	
			DP	11	12	4			MOSI			RX	PRU	
			ID	13	14	3.3V			SYS					
GND	15	16	GND											
AIN 1.8V			REF-	17	18	REF+	AIN 1.8V							
			0	19	20	20	GPIO			16(in)	PRU0			
			1	21	22	GND	SYS							
			2	23	24	VOUT								
						3	25	26	12	GPIO		SDA	I2C2	TX
4	27	28				13	SCL	RX	CAN0					
PRU0	7	QEPO STRB		117	29	30	43	GPIO		TX	UART0		15	PRU1
		A	114	31	32	42	RX			14			PRU1	
		B	110	33	34	26								
PRU1	10			88	35	36								

P2													
		PWM1	A	50	1	2	59						
		PWM2	B	23	3	4	58						
UART4			RX	30	5	6	57	GPIO					
			TX	31	7	8	60						
CAN1	RX	I2C1		SCL	15	9	10	52					
				SDA	14	11	12	PWR BTN	SYS				
SYS			VOUT	13	14	VIN	BAT						
			GND	15	16	TEMP							
GPIO			65	17	18	47	GPIO		STRB	QE2	15i	PRU0	
			27	19	20	64							
SYS			GND	21	22	46	GPIO		IDX	QE2		14(in)	PRU0
			3.3V	23	24	48			A			14(out)	
CAN1	RX	SPIO		MOSI	41	25	26	NRST	SYS				
				MISO	40	27	28	124	GPIO		IDX	QEPO	6
PRU	eCAP	CLK	7	29	30	113	GPIO						3
PRU1	16(in)	CS	19	31	32	112			GPIO		B	QEPO	5
PRU0	15(out)	QE2	B	45	33	34	115						
PRU1	8	AIN 3.3V	5	86	35	36	7	AIN 1.8V					