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DATE	REVISION NUMBER	INITIALS	DESCRIPTION
<DATE>	<REVISION NUMBER>	<INITIALS>	<DESCRIPTION>
8/8/2012	-020	LRC	Added 5GHz PA's. Changed default strapping. Updated RF component values. Added termination on Ethernet MDI lines.
8/30/2012	(cont'd)	LRC	Removed mini PCIe edge connector, USB header and ESD/EMI components, and 5 to 3.3V power supply.
9/4/2012		LRC	Added 20 and 30 position FFC connectors.
			Additional RF value changes from Charles. Added ESD protection for external antennas. Added 0 Ohm to power PA's.
11/30/2012	-030	LRC	RF tuning updates from Charles. Change L66,67 to 5.1nH. L70,71 to 3.9nH, L72,97,102 to 2.2nH, L104,105 to 1.5nH, L101,108 to NL.L82,83 to 7.5nH, L103 to 0 Ohm, L106,107 to 1.4nH
			Change C401,411,444,445 to 2.2p, C407,409,410,514 to 1.3p, C406 to 1.8p, C412 to 2p, C413,414,455,458,459,516 to 1.2p, C422,473 to 0.5p, C501,515 to 0 Ohm, C460,461,469,470 to 1p, C456 to NL
1/3/2013	-031	LRC	Changed R278 to NO LOAD. Changed CPU to SKIFTA01-DC3A
2/13/2013	-032	LRC	RF Tuning from Charles. Change C412 to 2.2pF; C413, C414 to 0.5pF; C461 to 1.8pF; C458, C459,C516,C455 to 1.3pF; C469,C470 to 0.3pF; L108 to 8.2nH, C515 to 1.0nH.
2/19/2013	-033	LRC	No electrical change. The "032" number was compromised.

SKIFTA AUDIO MODULE

Base Design Document

CUS227 245-02379-033

Product configurations available for this design:


CUS227 2XX-02379-033 SAM

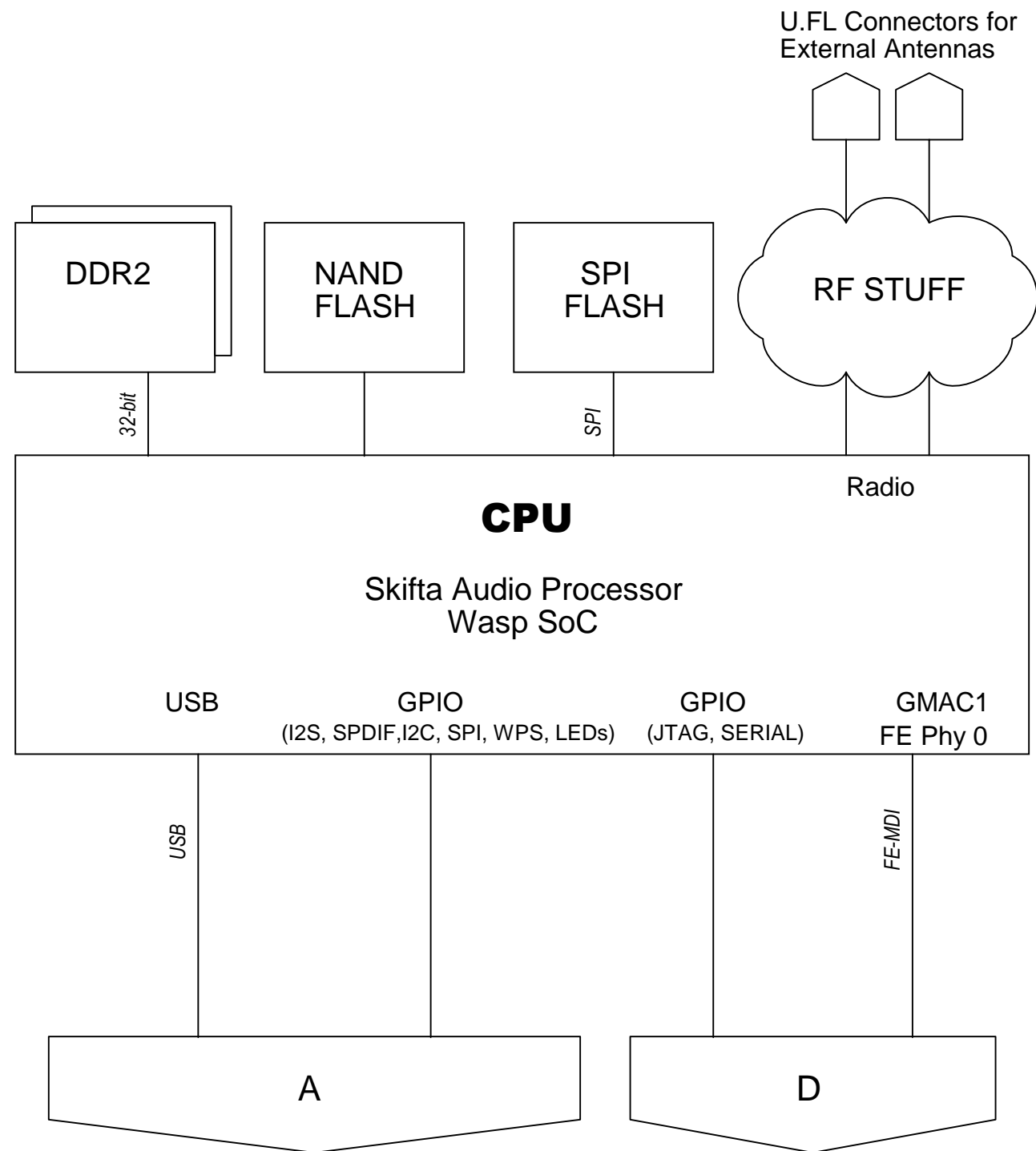
CUS227 2XX-02379-133 BAM

SAM / BAM memory configurations on page 8.

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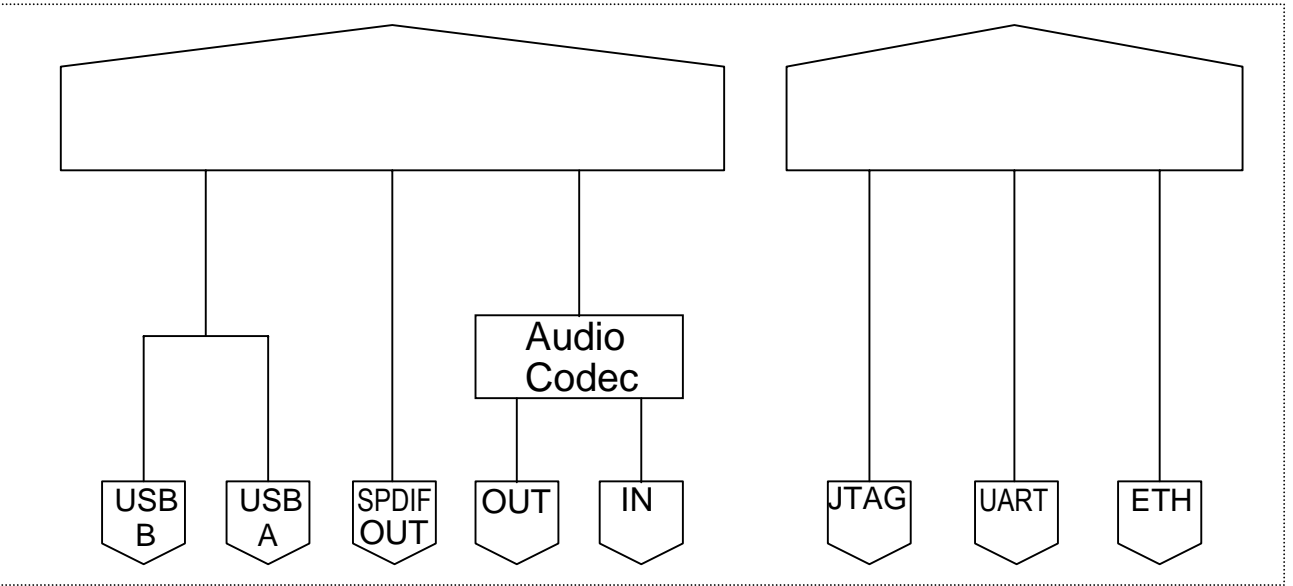
CONTRACT NO.		 QUALCOMM Atheros 1700 TECHNOLOGY DRIVE SAN JOSE, CA 95110, USA			
DRAWN BY	DATE				
ENGINEER					
PROJECT ENGINEER					
QUALITY ASSURANCE					
CONFIGURATION		Skifta Audio Module			
DESIGN ACTIVITY APPROVAL					
DESIGN APPROVAL					
SIZE	CAGE Code			DWG NO	REV
C	<Cage Code>			CUS227 245-02379-033	<RevCode>
SCALE		RELEASE DATE		SHEET	
NONE		<Date>		1 of 12	



Connector A, a 30 position FFC connector, is targetted at Analog Audio and Accessory Additional Applications.

Multi pin FFC/FPC connectors for full integration, including 10/100 Ethernet, Digital audio, and connections for an Off board audio DAC or CODEC, and power. Customer is responsible for Audio DAC, ADC, or CoDec.

Connector D, a 20 position FFC connector, is targetted Development, Debug, and Data Driven Devices.



Both A and B USB connectors are included for development as either a Host or a Device. Both cannot be used simultaneously

This is a separate carrier board reference design, including Audio CoDec and connectors for Audio in, out, S/PDIF and Ethernet, and including LED's and buttons for GPIO.

Audio Application

For Audio application, the "A" connector implements all signals necessary for external audio converters, including I2S, I2C, and SPI. A S/PDIF connection is also included for consumer digital audio, as well as spare GPIO pins for buttons and LED's. Unused pins are mostly available for additional GPIO. USB is also included on tse connector for USB device applications.The module may be powered by either connector. The connectors may be used together or separately.

Ethernet connedcted host

For Networking or Developmet applications, Ethernet is on the "D" connector along with Serial/UART pins and the JTAG debug port. The module may be powered by either connector. The connectors may be used together or separately.

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QUALCOMM ATHEROS
1700 TECHNOLOGY DRIVE
SAN JOSE, CA 95110

TITLE
Block Diagram

DATE	<DATE>	SIZE	<SIZE>	REV	<RevCode>	SHEET	2	OF	12	DWG NO	CUS227 245-02379-033
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QUALCOMM ATHEROS
1700 TECHNOLOGY DRIVE
SAN JOSE, CA 95110

TITLE			
Power Distribution			
DATE	<DATE>	SIZE	<SIZE>
REV	<RevCode>	SHEET	3 OF 12
DWG NO		CUS227 245-02379-033	