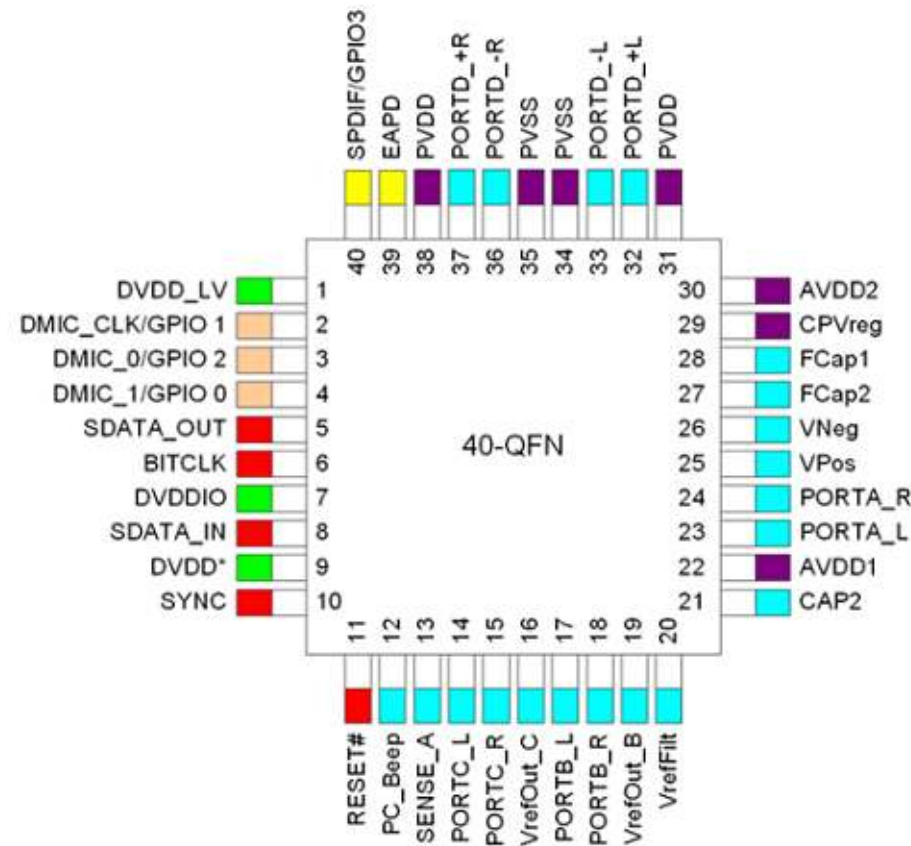


Tempo 92HD95 Customer Reference Schematics

The 92HD95 audio CODEC is a high fidelity 4-channel audio codec compatible with the Intel High Definition Audio (HDA) Interface. This reference design is to allow the customer to integrate the codec while maintaining the desired performance of the part.



HDA HEADER
PAGE 5

HDA BUS

CODEC
PAGE 2

PORTS
PAGE 3

PORTA/B



CLASS D SPK



INT. Analog Mic



INT. Digital Mics



PCBeep

REV	DATE	DESCRIPTION	CHANGED BY
A	27Jan15	Initial Release	KAL

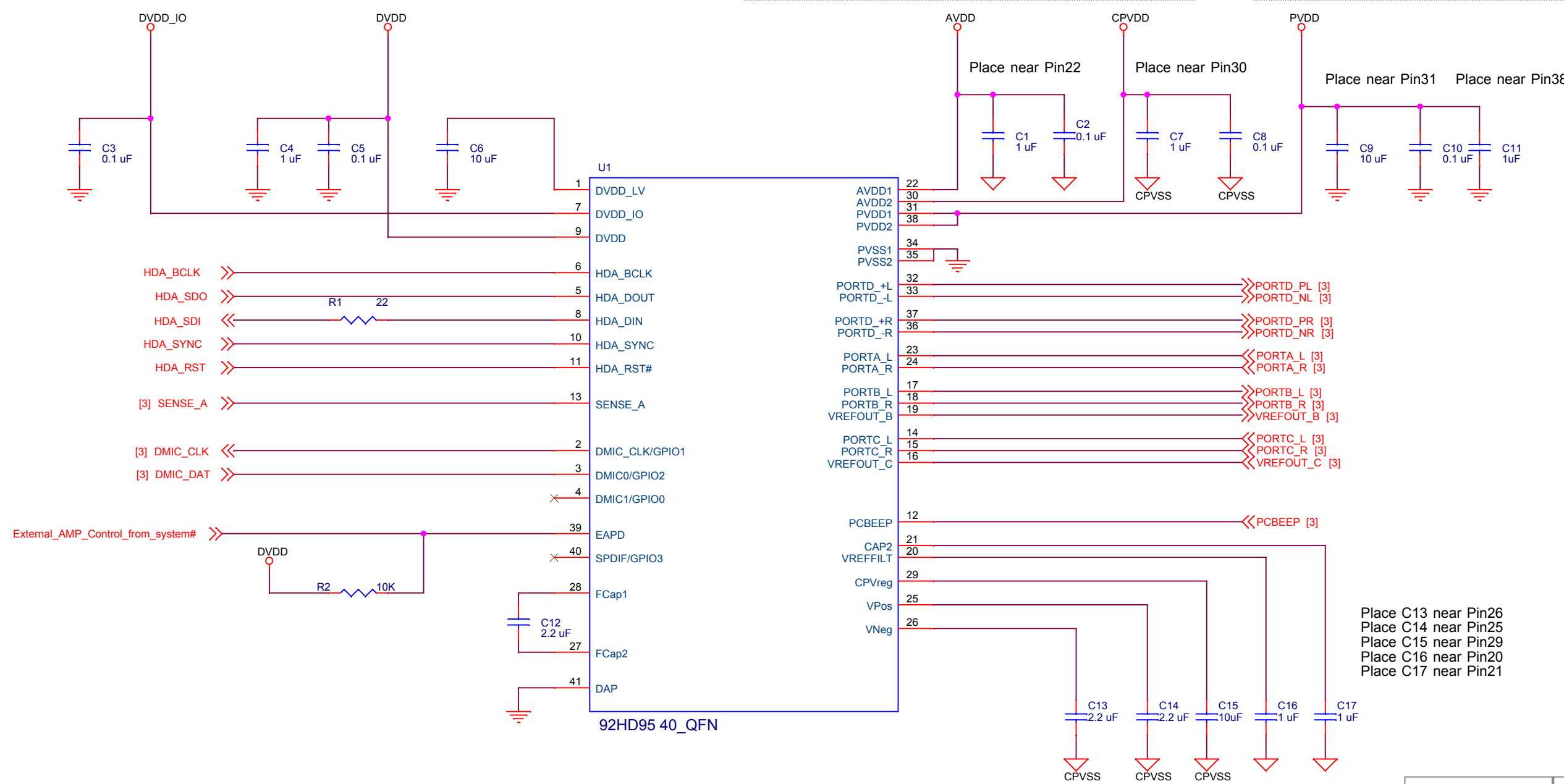


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Title 92HD95 Reference Schematics			HDA PC Audio
Size Custom A	Rev A	Document Number Block	
Date: Tuesday, January 27, 2015			Sheet 1 of 3

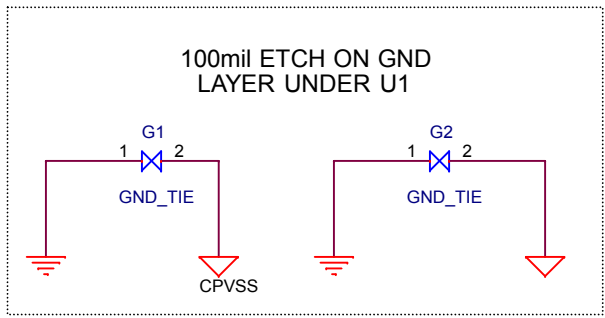
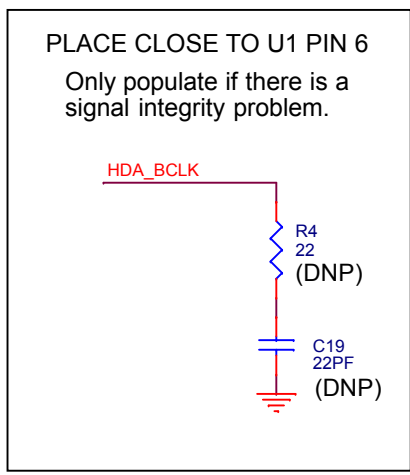
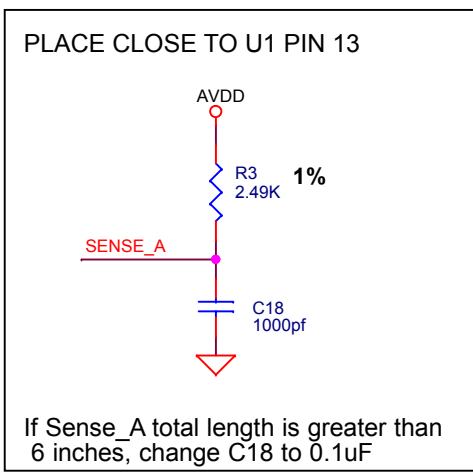
Notes:
 AVDD and CPVDD should be isolated
 AVDD from System power by LDO or a ferrite bead as bridge
 CPVDD from System power by LDO or a 0ohm resistor as bridge

Notes:
 Keep PVDD supply and speaker traces routed on the DGND plane.
 Keep away from AGND and other analog signals



Place C13 near Pin26
 Place C14 near Pin25
 Place C15 near Pin29
 Place C16 near Pin20
 Place C17 near Pin21

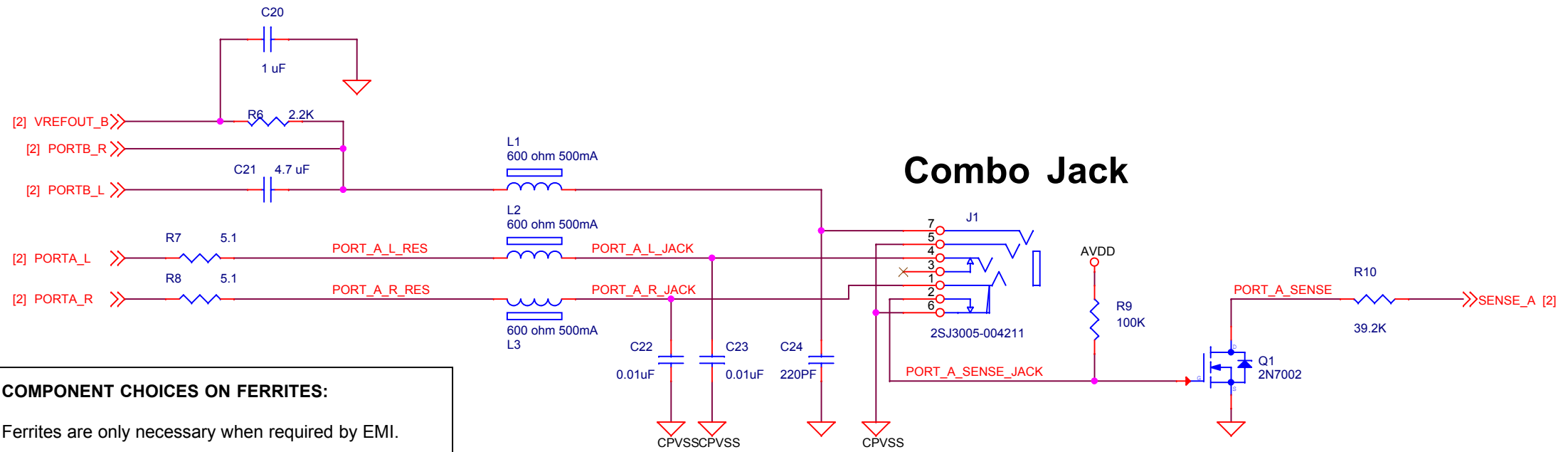
Resistor	SENSE_A
39.2K	PORT A
20.0K	PORT B
10.0K	PORT C
5.11K	SPDIFOUT
2.49K	Pull-up to AVDD



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Title 92HD95 Reference Schematics			HDA PC Audio
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Date: Wednesday, February 22, 2017			Sheet 2 of 3



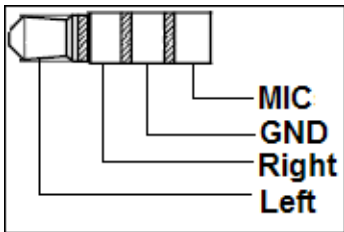
Combo Jack

COMPONENT CHOICES ON FERRITES:

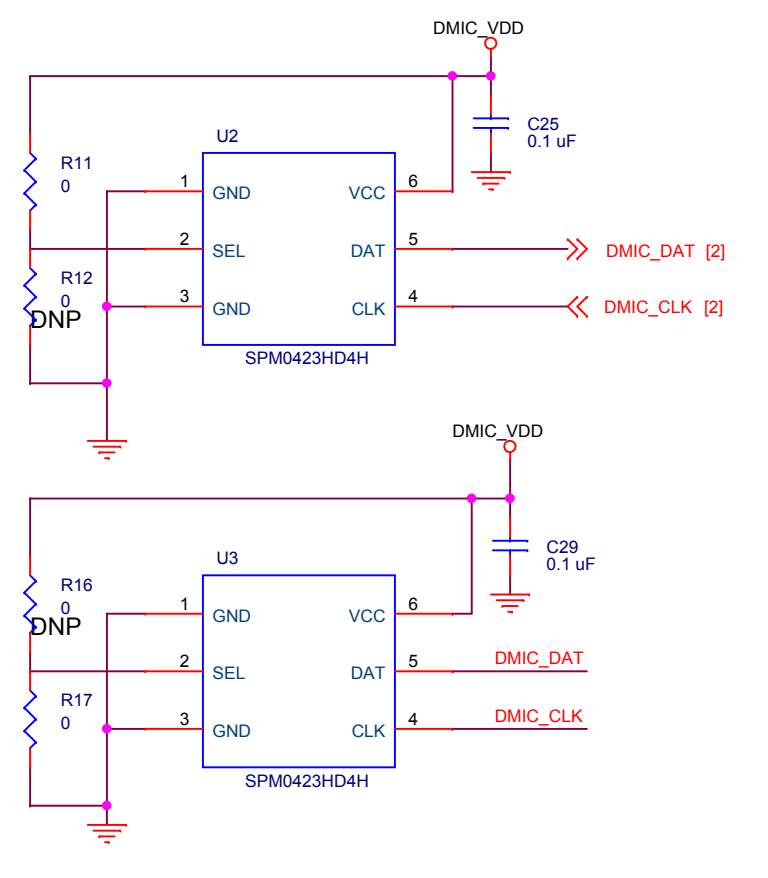
Ferrites are only necessary when required by EMI.

The selection of ferrite beads can have a large effect on THD+N, causing failures versus the WLP requirements. At this time, IDT has verified three ferrite beads that will meet the WLP performance requirements:

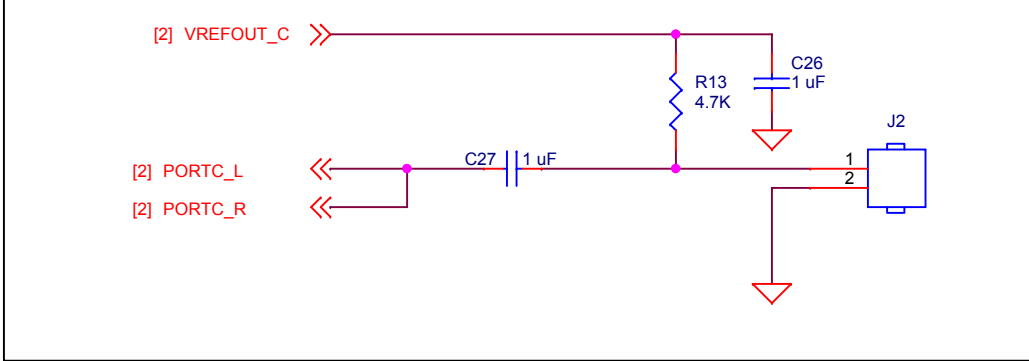
Murata: BLM18BD601SN1
 TDK: MMZ1608Y601BTA
 Taiyo Yuden: LF BK 1608HM601-T



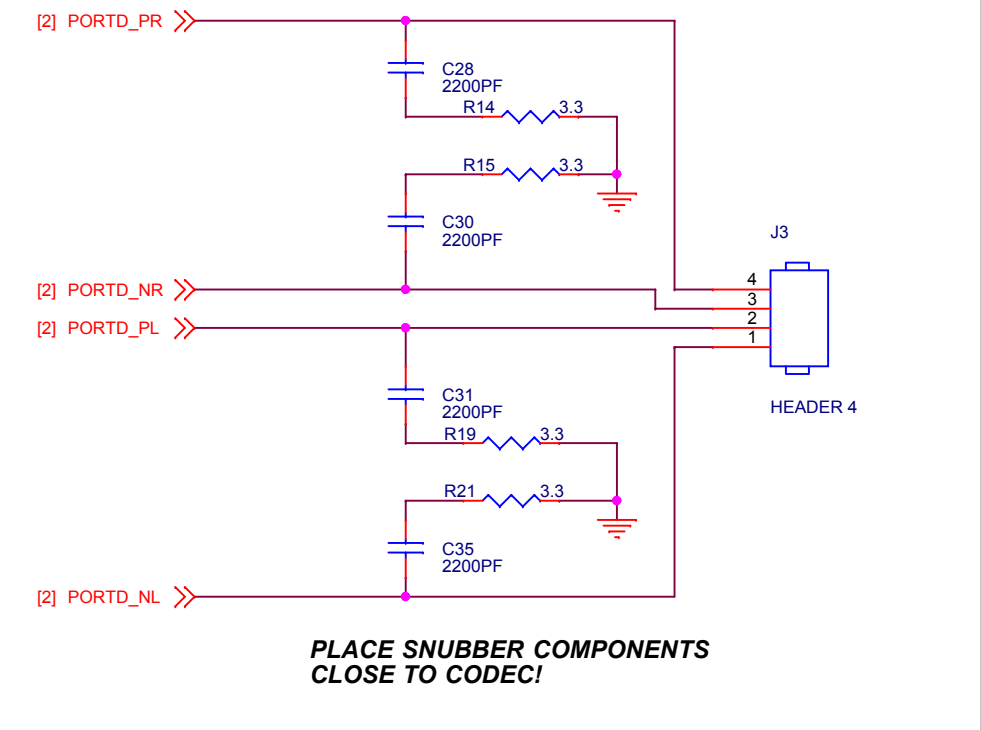
Internal DMIC Option



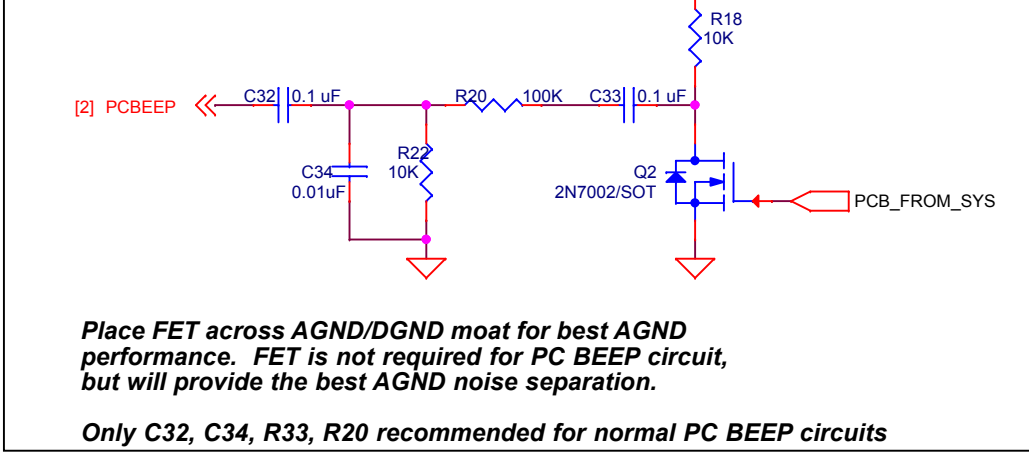
Internal Analog Mic Option



Internal Speakers Header



Internal PCBEEP



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Title 92HD95 Reference Schematics			HDA PC Audio
Size Custom A	Rev A	Document Number Ports	
Date: Friday, March 06, 2015			Sheet 3 of 3