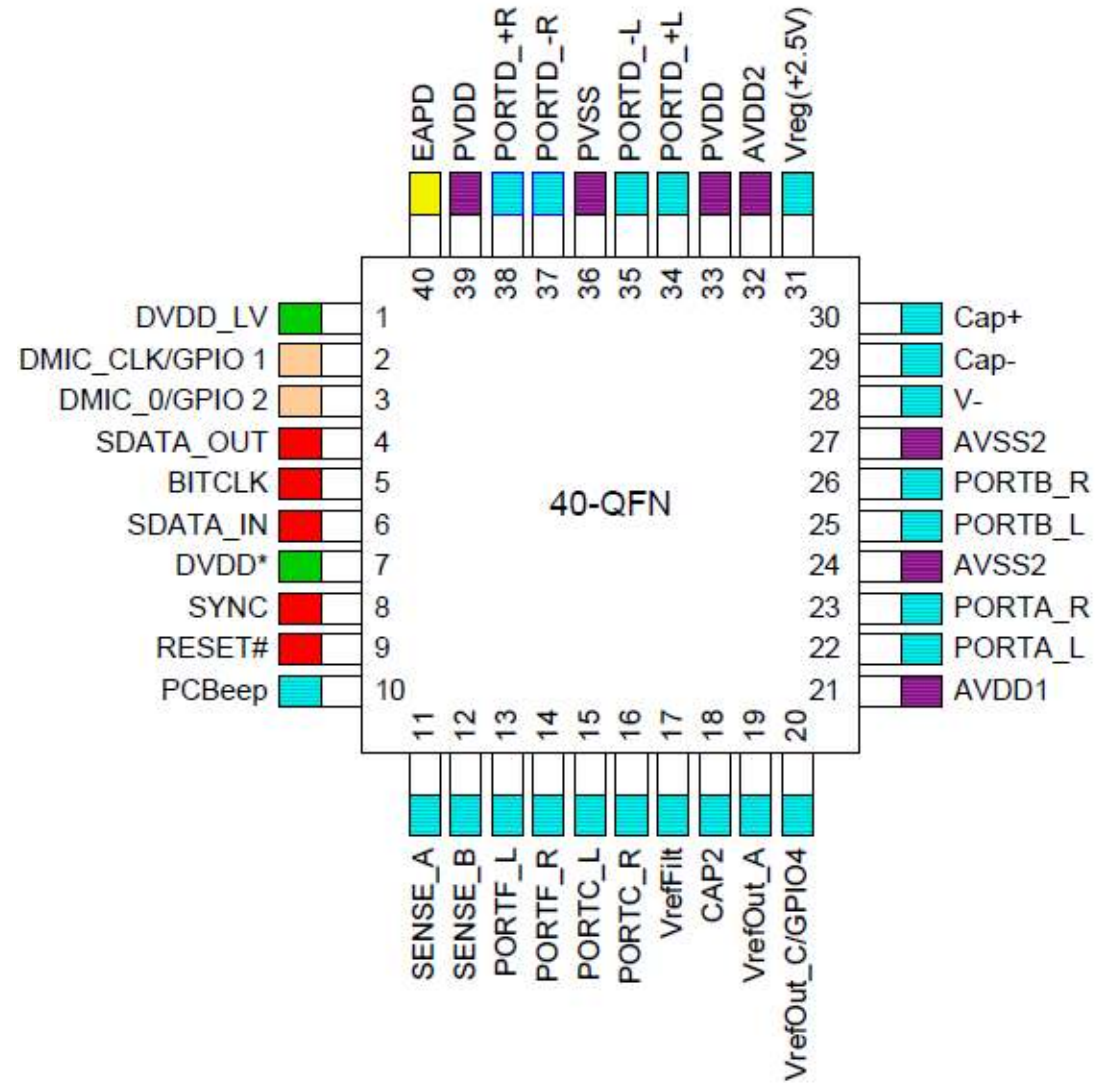


# Tempo 92HD99 Reference Schematics

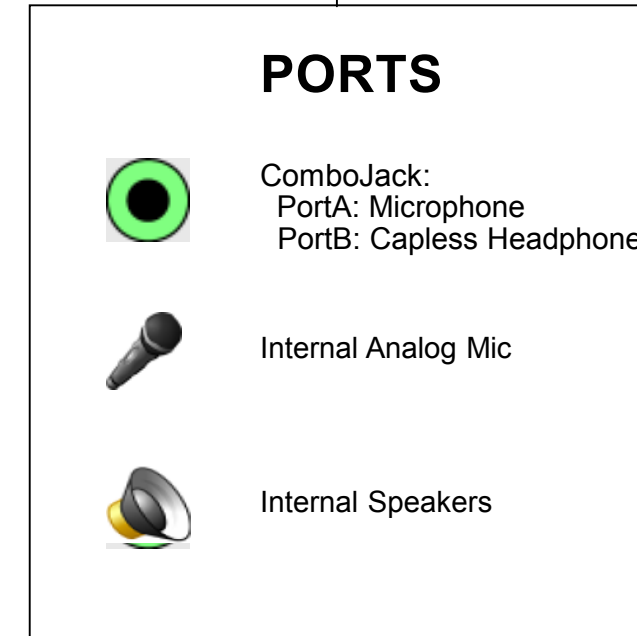
The Tempo 92HD99 is part of a family of 4-channel High Definition Audio (HDA) codecs. These codecs provide high-quality 2 channel audio with simultaneous RTC (VoIP), capless headphone output, 2W per channel stereo speaker amplifier(ClassD), digital microphones. For more information on these codecs, and a specific breakdown of features supported by each codec, please contact your Tempo support representative. This schematic is a basic mobile reference design with a combo jack(stereo capless headphone output and microphone), stereo speakers, internal analog microphone, external microphone,digital microphones. Check with your Tempo support representative for examples and requirements of other applications. This schematic meets the most current WLP performance requirements. System component layout must also be implemented per IDT recommendations to meet WLP performance requirements. See your IDT representative for technical support.




**Host PC**

HDA Bus

**Codec**



REV	DATE	DESCRIPTION	CHANGED BY
X	28May10	Initial Release	Flex



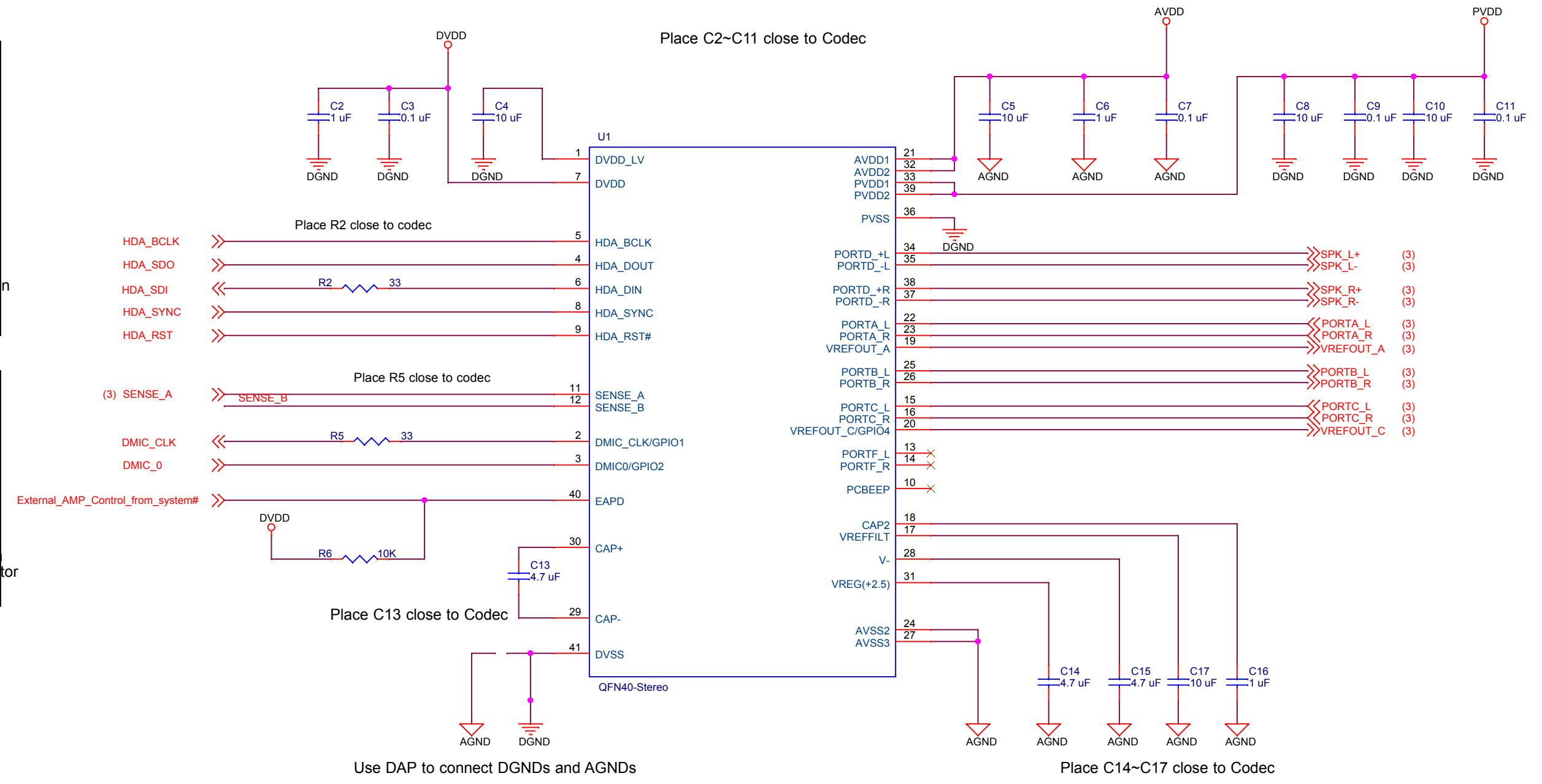
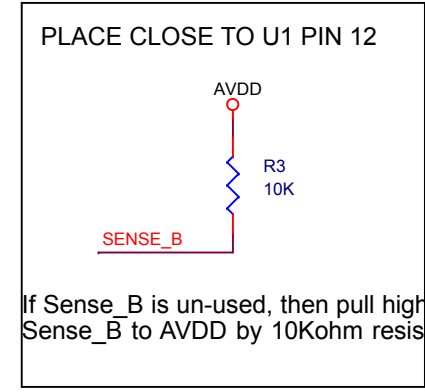
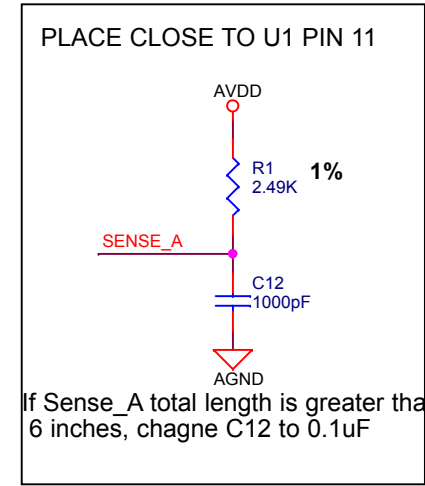
Tempo Semiconductor, Inc.  
8627 N. Mopac Expy.  
Suite 130  
Austin, TX 78759  
tel: (512) 827-3440  
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**92HD99 Customer Reference Schematics**

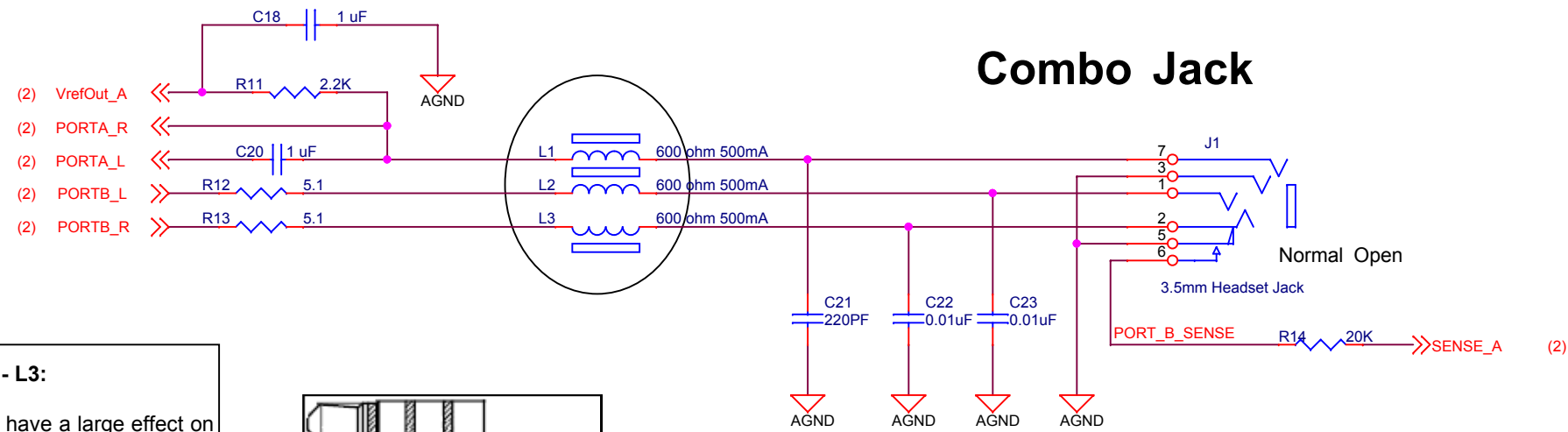
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Notes:  
 Keep PVDD supply and speaker traces routed on the DGND plane.  
 Keep away from AGND and other analog signals



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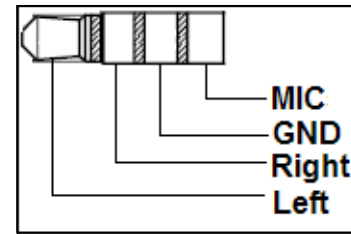


## Combo Jack

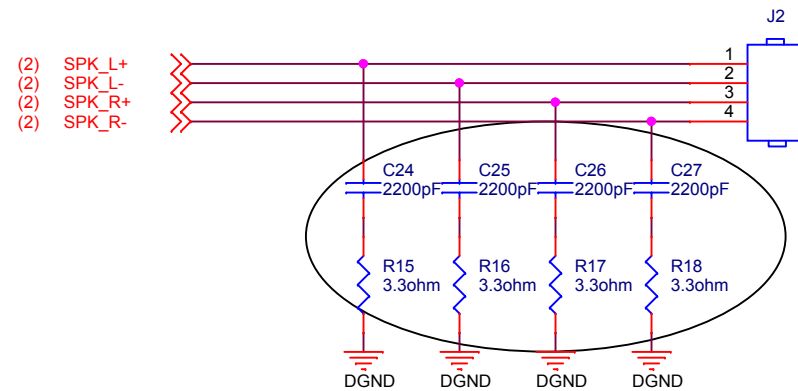
### COMPONENT CHOICES ON L1 - L3:

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

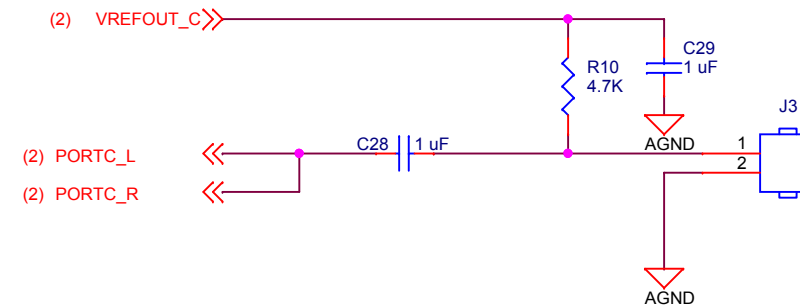


## Internal Speakers Header



The C24~C27 and R15~R18 MUST be populated and CLOSE to CODEC  
 IDT will review circuit to ensure operability with chosen parts value

## Internal Microphone Header



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