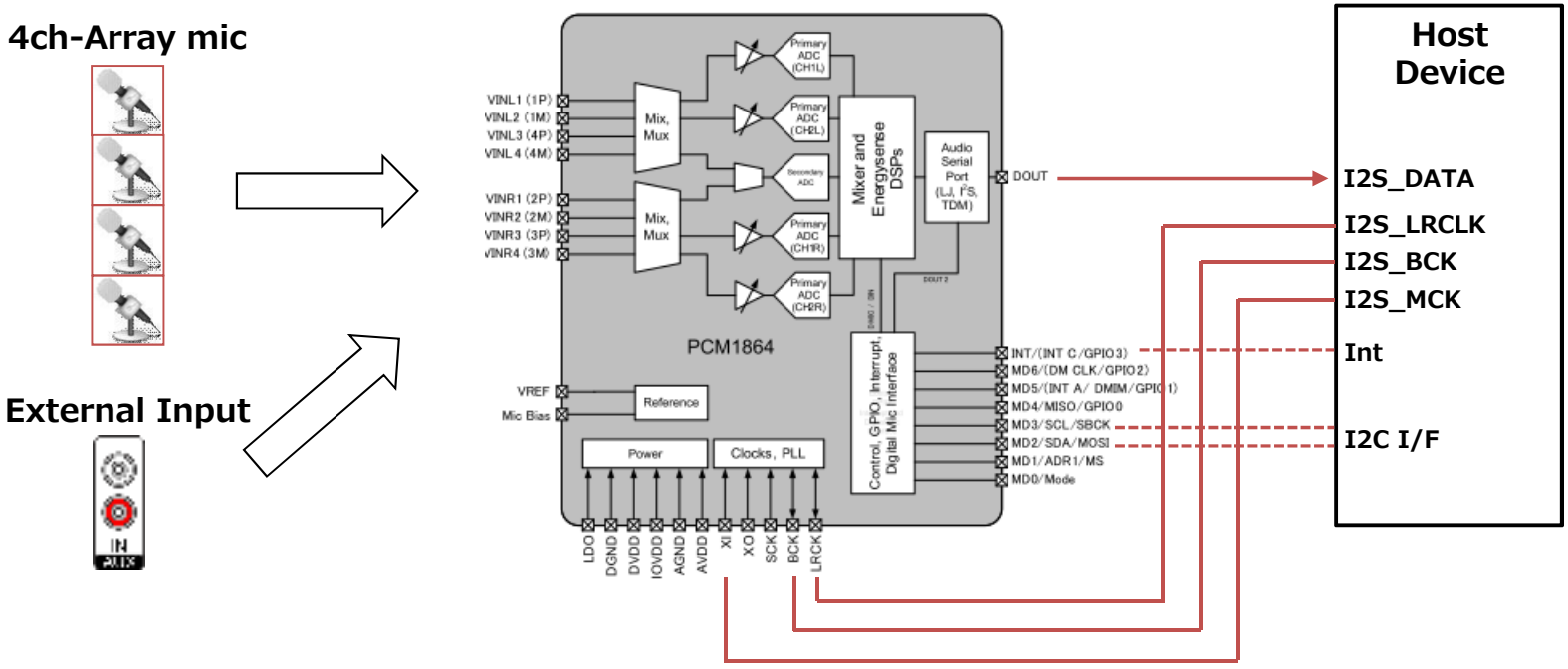
How to connect array mic using PCM1864

Our use condtions

Item	Parameter	Comment
Analog input 4-ch	Single-end mic inputs for array-mic	4-ch inputs simultaneously. Requires sampling at the same timing (same LRCLK Edge).
Other analog input 2-ch	Analog inputs (L/Rch)	Analog input from the external
Audio Output	I2S I/F, using TDM-mode	I/F signals LRCLK, BCK, DOUT1, *no use DOUT2



Question 1

In our use condtions, Could you tell us the recommended about these input connections?

In array mic(4ch), we need sampling at th same timing .

<Example>

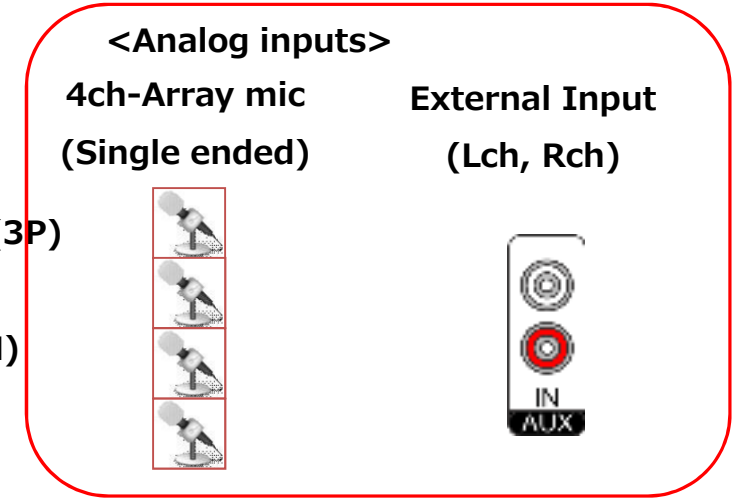
CaseA:

4ch-Array mic

1ch-VINL1(1P), 2ch-VINL2(4P), 3ch-VINR1(2P), 4ch-VINR3(3P)

External input

Lch-VINL2(1M) or VINL4(4M), Rch-VINR2(2M) or VINR4(3M)



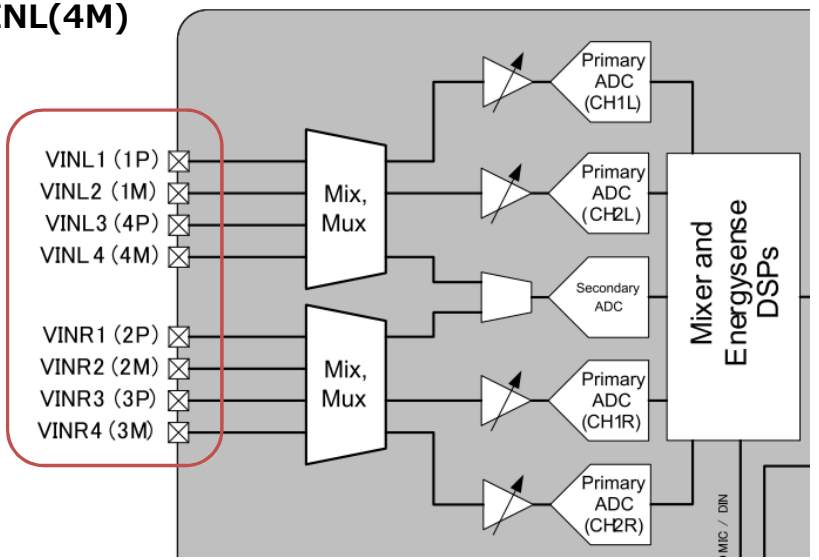
CaseB:

4ch-Array mic

1ch-VINL1(1P), 2ch-VINL2(1M), 3ch-VINL3(4P), 4ch-VINL(4M)

External input

Lch-VINR[1:4], Rch-VINR[1:4]



Question 2

About Serial Audio Interface Timing

In datasheet(SLASE55A, page50), Figure45, there is describe audio data format by timing chart.

We would like to know also about TDM-mode. Could you provide us the data format of TDM-mode?

10.21.2 Serial Audio Interface Timing Details

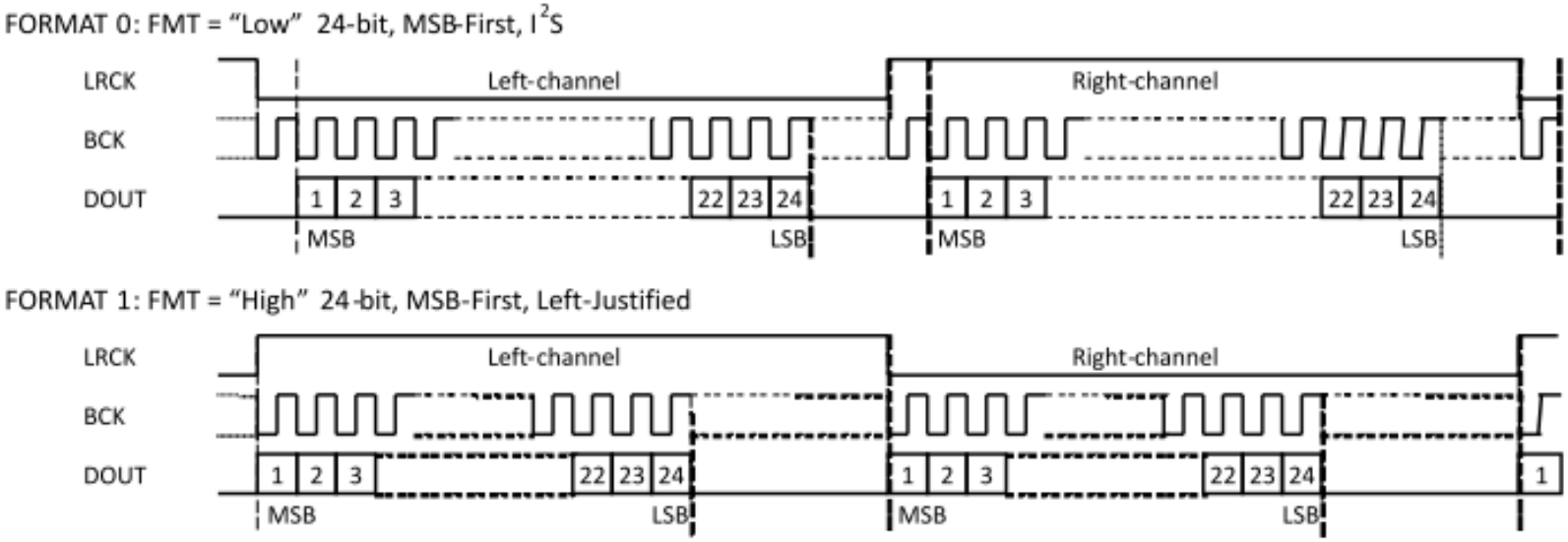


Figure 45. Audio Data Format
(LRCK and BCK work as inputs in slave mode and as outputs in master mode)