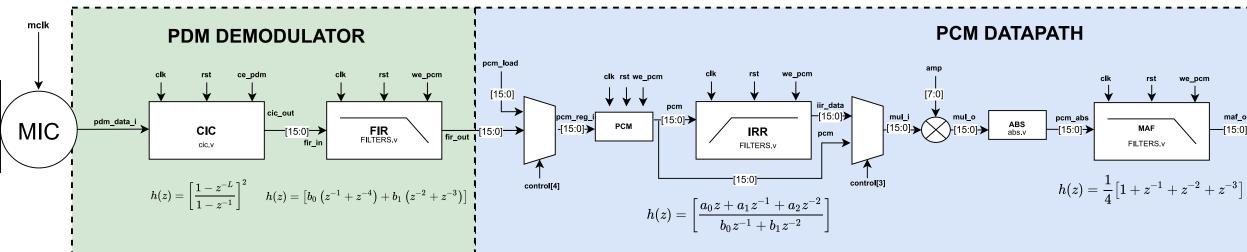
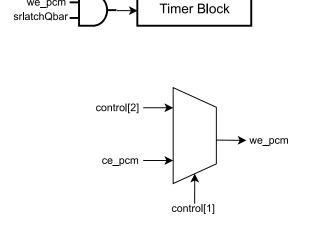
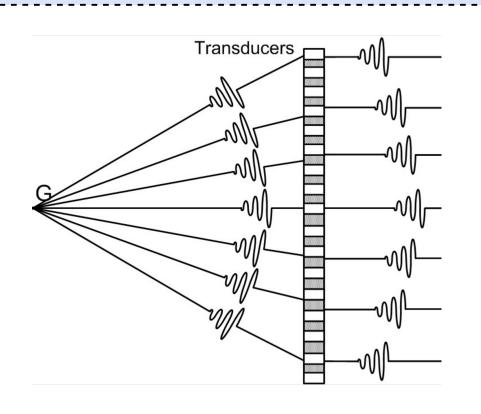
## Sonar On Chip Channel



Description	Name	Address Offset
Control register	control[7:0]	0x00
IIR Filter coefficient a0	a0 [15:0]	0x04
IIR Filter coefficient a1	a1 [15:0]	0x08
IIR Filter coefficient a2	a2 [15:0]	0x0C
IIR Filter coefficient b1	b1 [15:0]	0x10
IIR Filter coefficient b2	b2 [15:0]	0x14
Amplifier	amp [7:0]	0x18
Threshold	threshold [15:0]	0x1C
Timer	timer [15:0]	0x20
Pcm	pcm [15:0]	0x24
Pcm Load	pcm [15:0]	0x28
FIR Filter coefficient b0	fb0 [15:0]	0x2C
FIR Filter coefficient b1	fb1 [15:0]	0x30

## **Clock divider Modules**





threshold [15:0]

comparator.v

SR\_latch.v

-[15:0]→ COMPARATOR