

Layer (type:depth-idx)	Output Shape	Param #
Base_3DCAE	[64, 1, 8, 64, 64]	--
└─Conv3d: 1-1	[64, 32, 8, 64, 64]	1,472
└─MaxPool3d: 1-2	[64, 32, 8, 32, 32]	--
└─Conv3d: 1-3	[64, 16, 8, 32, 32]	23,056
└─MaxPool3d: 1-4	[64, 16, 4, 16, 16]	--
└─Conv3d: 1-5	[64, 8, 4, 16, 16]	5,768
└─MaxPool3d: 1-6	[64, 8, 2, 8, 8]	--
└─MaxUnpool3d: 1-7	[64, 8, 4, 16, 16]	--
└─ConvTranspose3d: 1-8	[64, 16, 4, 16, 16]	5,776
└─MaxUnpool3d: 1-9	[64, 16, 8, 32, 32]	--
└─ConvTranspose3d: 1-10	[64, 32, 8, 32, 32]	23,072
└─MaxUnpool3d: 1-11	[64, 32, 8, 64, 64]	--
└─ConvTranspose3d: 1-12	[64, 1, 8, 64, 64]	1,441
Total params: 60,585		
Trainable params: 60,585		
Non-trainable params: 0		
Total mult-adds (G): 31.05		
Input size (MB): 8.39		
Forward/backward pass size (MB): 767.56		
Params size (MB): 0.24		
Estimated Total Size (MB): 776.19		

Layer (type:depth-idx)	Output Shape	Param #
Base_3DCAE_2	[64, 1, 8, 64, 64]	--
└─Conv3d: 1-1	[64, 16, 8, 64, 64]	736
└─MaxPool3d: 1-2	[64, 16, 8, 32, 32]	--
└─Conv3d: 1-3	[64, 8, 8, 32, 32]	5,768
└─MaxPool3d: 1-4	[64, 8, 4, 16, 16]	--
└─Conv3d: 1-5	[64, 8, 4, 16, 16]	2,888
└─MaxPool3d: 1-6	[64, 8, 2, 8, 8]	--
└─ConvTranspose3d: 1-7	[64, 8, 2, 8, 8]	2,888
└─MaxUnpool3d: 1-8	[64, 8, 4, 16, 16]	--
└─ConvTranspose3d: 1-9	[64, 8, 4, 16, 16]	2,888
└─MaxUnpool3d: 1-10	[64, 8, 8, 32, 32]	--
└─ConvTranspose3d: 1-11	[64, 16, 8, 32, 32]	5,776
└─MaxUnpool3d: 1-12	[64, 16, 8, 64, 64]	--
└─ConvTranspose3d: 1-13	[64, 1, 8, 64, 64]	721
Total params: 21,665		
Trainable params: 21,665		
Non-trainable params: 0		
Total mult-adds (G): 9.51		
Input size (MB): 8.39		
Forward/backward pass size (MB): 394.79		
Params size (MB): 0.09		
Estimated Total Size (MB): 403.26		

Layer (type:depth-idx)	Output Shape	Param #
CNN_3D	[1, 8, 64]	--
└Conv3d: 1-1	[64, 64, 8, 64, 64]	1,792
└MaxPool3d: 1-2	[64, 64, 4, 32, 32]	--
└Conv3d: 1-3	[64, 128, 4, 32, 32]	221,312
└MaxPool3d: 1-4	[64, 128, 2, 16, 16]	--
└Conv3d: 1-5	[64, 64, 2, 16, 16]	221,248
└MaxPool3d: 1-6	[64, 64, 1, 8, 8]	--
└Conv3d: 1-7	[64, 32, 1, 8, 8]	55,328
└MaxPool3d: 1-8	[64, 32, 1, 4, 4]	--
└Conv3d: 1-9	[64, 16, 1, 4, 4]	13,840
└MaxPool3d: 1-10	[64, 16, 1, 2, 2]	--
└Linear: 1-11	[64, 16]	1,040
└Linear: 1-12	[64, 16]	272
└Linear: 1-13	[64, 8]	136

Total params: 514,968

Trainable params: 514,968

Non-trainable params: 0

Total mult-adds (G): 69.26

Input size (MB): 8.39

Forward/backward pass size (MB): 1360.15

Params size (MB): 2.06

Estimated Total Size (MB): 1370.60

Layer (type:depth-idx)	Output Shape	Param #
MultiModal_3DCAE	[64, 1, 8, 64, 64]	721
└Conv3d: 1-1	[64, 16, 8, 64, 64]	736
└MaxPool3d: 1-2	[64, 16, 8, 32, 32]	--
└Conv3d: 1-3	[64, 8, 8, 32, 32]	5,768
└MaxPool3d: 1-4	[64, 8, 4, 16, 16]	--
└Conv3d: 1-5	[64, 8, 4, 16, 16]	2,888
└MaxPool3d: 1-6	[64, 8, 2, 8, 8]	--
└Conv3d: 1-7	[64, 16, 8, 64, 64]	736
└MaxPool3d: 1-8	[64, 16, 8, 32, 32]	--
└Conv3d: 1-9	[64, 8, 8, 32, 32]	5,768
└MaxPool3d: 1-10	[64, 8, 4, 16, 16]	--
└Conv3d: 1-11	[64, 8, 4, 16, 16]	2,888
└MaxPool3d: 1-12	[64, 8, 2, 8, 8]	--
└ConvTranspose3d: 1-13	[64, 8, 2, 8, 8]	2,888
└MaxUnpool3d: 1-14	[64, 8, 4, 16, 16]	--
└ConvTranspose3d: 1-15	[64, 8, 4, 16, 16]	2,888
└MaxUnpool3d: 1-16	[64, 8, 8, 32, 32]	--
└ConvTranspose3d: 1-17	[64, 16, 8, 32, 32]	5,776
└MaxUnpool3d: 1-18	[64, 16, 8, 64, 64]	--
└ConvTranspose3d: 1-19	[64, 1, 8, 64, 64]	721
└ConvTranspose3d: 1-20	[64, 8, 2, 8, 8]	2,888
└MaxUnpool3d: 1-21	[64, 8, 4, 16, 16]	--
└ConvTranspose3d: 1-22	[64, 8, 4, 16, 16]	2,888
└MaxUnpool3d: 1-23	[64, 8, 8, 32, 32]	--
└ConvTranspose3d: 1-24	[64, 16, 8, 32, 32]	5,776
└MaxUnpool3d: 1-25	[64, 16, 8, 64, 64]	--
└ConvTranspose3d: 1-26	[64, 1, 8, 64, 64]	(recursive)

Total params: 43,330

Trainable params: 43,330
Non-trainable params: 0
Total mult-adds (G): 19.02

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Input size (MB):	16.78
Forward/backward pass size (MB):	789.58
Params size (MB):	0.17
Estimated Total Size (MB):	806.53

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