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24-bit ADC Voltage Reference recommendation



[randall veitch](#)

[Prodigy_190](#) 190 points

Community Member

Other Parts Discussed in Thread: [REF5040](#)

Is there a recommended voltage reference device for a 24 bit ADC system. I have noticed some that are specified for 12-16 bit systems, but have not seen one recommended for a 24 bit or higher system.

Any recommendations here? For instance. I am interested in a 4.093V reference suitable for a 24 bit system.

[over 4 years ago](#)



[Joseph Wu](#) *over 4 years ago*

[TI_Guru*](#) 92995 points

Randall,

I think the reference that we commonly recommend for 24-bit ADCs is the REF50xx. For your case, I think the REF5040 is a 4.096V reference that would most suit your needs. Typically, the characteristics that most would look for in a reference to pair up with a 24-bit are accuracy, drift, and noise.

What sort of application are you building? It may help to know more about your measurement if you'd like some recommendations about components for your system.

Joseph Wu



[Cynthia](#) *over 4 years ago*

[TI_Mastermind](#) 24940 points

Hello,

The REF60xx or REF50xx families have great devices that should be able to support 24 bit performance. you would be looking at the [REF6041](#) or the [REF5040](#)

I also did a quick parametric search for series references and limited the accuracy to 0.5%, which resulted in [13 devices](#), for you to consider

Regards

Cynthia



[randall veitch](#) *over 4 years ago in reply to Joseph Wu*

[Prodigy_190](#) 190 points

Thank you for your help.

Randy