

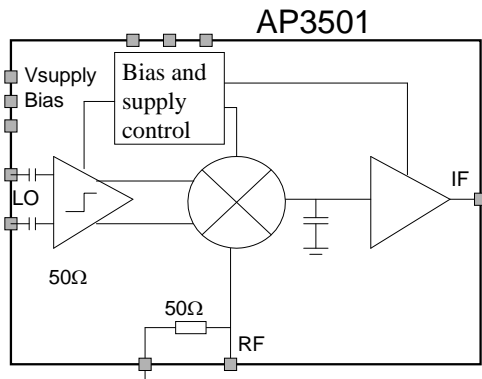
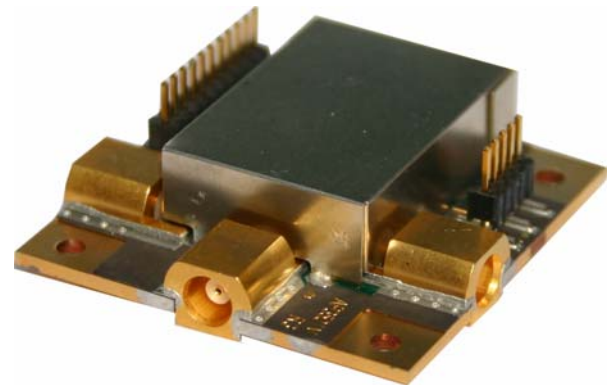
Product Brief

35 GHz Bandwidth Sampler AP3501

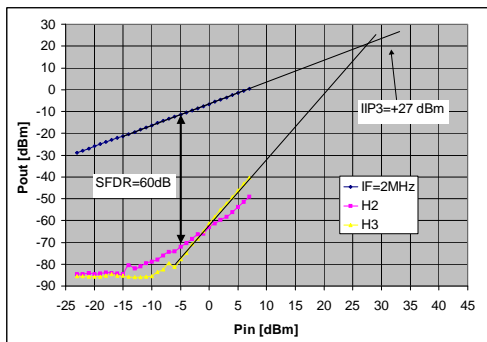
The AnaPico AP3501 is a highly integrated 35 GHz bandwidth sampler featuring up to 1 GSamples/s sampling rate and very low additive jitter.

Driven by standard ECL logic, the AP3501 accepts DC coupled RF signals over a -1 to +1 V dynamic range.

The AP3501 is available as a compact module and enables high-speed sampling with minimum additional components.



AP3501 Block Diagram



Intermodulation Performance

Features

- High Integration (strobe pulse generation, pre- post amplification)
- ECL-compatible strobe input signal
- Memory-free sampling with Reset after each sample

Specifications

- 35 GHz usable bandwidth
- ±1 V linear input range
- 60 dB SFDR
- High sampling rates
- <0.5 mVrms noise
- Power consumption: <2 W

Applications

- Equivalent time sampling
- Down-sampling receivers
- Sampling frequency converters

Key Specifications

Parameter	Value	Notes
Input bandwidth	DC – 35 GHz	
Input voltage range	-1 V to + 1V	
Conversion gain	0.75 V/V	sampling rate dependent
SFDR	60 dB	
Sampling rate	DC – 1000 MS/s	
Aperture jitter	< 100 fs (RMS)	
Output offset range	-1.5 V to + 1.5V	
Output noise	0.5 mV (RMS)	Integrated over IF bandwidth
RF input impedance VSWR	50 Ω 1.3	
IF output impedance	50 Ω	
Latency	6 ns	
LO Strobe input	PECL	
Power consumption	2 W	