

Master FcHz	Resolution (Bits)	Tuning Word Width (Bits)	Nominal Supply (V)	I Supply Total (Max.)	FS Iour Nominal (mA)	Compliance Range (V)	REFCLK Multiplier	On-Board Comparator	I/O Interface	Package	Digi-Key Part No.	Price Each					
												1	25	100			
25MHz	10	32	Single (+3.3), Single (+3.6), Single (+5.0)	15mA	4	1.5	No	No	Parallel	48-LQFP	AD9831ASTZ-ND	9.00	8.11	7.19			
25MHz	10	32	Single (+3.6), Single (+5.0)	15mA	4	1.35	No	No	Serial	16-TSSOP	AD9832BRUZ-ND	7.19	6.48	5.75			
50MHz	10	32	Single (+5.0)	60mA	20	1.0	No	No	Parallel	48-TQFP	AD9830AST-ND AD9830ASTZ-ND	14.83 14.18	13.85 13.24	12.86 12.29			
50MHz	10	28	Single (+2.3 to +5.5), Single (+2.5), Single (+2.7), Single (+3.0), Single (+3.3), Single (3.6), Single (+5.0)	8mA	3	0.8	No	Yes	Serial	20-TSSOP	AD9834BRU-ND AD9834BRUZ-ND	7.84 7.12	7.06 6.42	6.26 5.69			
75MHz	10	28	Single (+2.3 to +5.5)	8.7mA	3	0.8	No	Yes	Serial	20-TSSOP	AD9834CRUZ-ND	8.28	7.46	6.62			
50MHz	10	32	Single (+5.0)	40mA	4	1.35	No	No	Serial	16-TSSOP	AD9835BRUZ-ND	8.28	7.46	6.62			
125MHz	10	32	Single (+3.3), Single (+5.0)	96mA	20	1.5	No	Yes	Parallel, Serial	28-SSOP	AD9850BRSZ-ND	16.03	14.97	13.90			
180MHz	10	32	Single (+3.0), Single (+3.3), Single (+3.6), Single (+5.0)	130mA	20	1.5	Yes	Yes	Parallel	28-SSOP	AD9851BRSZ-ND	17.58	16.41	15.24			
250MHz	10	32	Single (+1.8)	63.5mA	4.6	0.8	Yes	No	Parallel, Serial	32-LFCSP	AD9913BCPZ-ND	12.52	11.68	10.85			
300MHz	12	48	Single (+3.3)	922mA	20	1.0	Yes	Yes	Parallel, Serial	80-LQFP	AD9852ASTZ-ND	19.79	18.47	17.15			
300MHz	12	48	Single (+3.3)	1210mA	10	1.0	Yes	Yes	Parallel, Serial	80-LQFP	AD9854ASTZ-ND	21.43	20.01	18.58			
400MHz	10	32	Multi (+1.8, +3.3)	N/A	20	2.05	Yes	No	Serial	48-TQFP	AD9859YSVZ-ND	12.65	11.81	10.96			
400MHz	14	32	1.8 and 3.3 or 1.8	N/A	10	2.05	Yes	No	Serial	48-TQFP	AD9951YSVZ-ND	17.82	16.63	15.45			
400MHz	14	32	Multi (+1.8, +3.3), Single (+1.8)	N/A	10	2.05	Yes	Yes	Serial	48-TQFP	AD9952YSVZ-ND	20.10	18.76	17.42			
500MHz	10	32	Multi (+1.85, +3.3), Multi (+1.8, +3.3)	105mA 180mA	10	2.3	Yes	—	Serial	56-LFCSP	AD9953YSVZ-ND	19.12	17.85	16.58			
1.0GHz	10	32	Multi (+3.3, +5.0)	N/A	40	3.8	No	No	Parallel, Serial	100-TQFP	AD9954YSVZ-ND	22.36	20.87	19.38			
1.0GHz	14	32	Single (+1.8), Single (+3.3)	N/A	20	0.5	Yes	—	Parallel, Serial	100-TQFP	AD9910BSVZ-ND	45.26	42.25	39.23			
1.0GHz	14	32	Multi (+1.8, +3.3)	759mA	20	0.5	Yes	—	Serial	100-TQFP	AD9957BSVZ-ND	27.23	25.41	23.60			
1.0GHz	14	48	Multi (+1.8, +3.3)	394mA	—	0.5	Yes	Yes	Serial	64-LFCSP	AD9912BCPZ-ND	48.30	45.08	41.86			
2.7GHz	14	48	Multi (+1.8, +3.3)	N/A	10	2.3	No	No	Serial	48-LFCSP	AD9956YCPZ-ND	22.36	20.87	19.38			
Evaluation Board for AD9831												EVAL-AD9831EB-ND			106.18	—	—
Evaluation Board for AD9832												EVAL-AD9832EBZ-ND			110.21	—	—
Evaluation Board for AD9833												EVAL-AD9833EBZ-ND			110.21	—	—
Evaluation Board for AD9834												EVAL-AD9834EBZ-ND			110.21	—	—
Evaluation Board for AD9850/FS												AD9850/FSPCB-ND			183.68	—	—
Evaluation Board for AD9910												AD9910/PCBZ-ND			276.43	—	—
Evaluation Board for AD9912												AD9912/PCBZ-ND			197.46	—	—
Evaluation Board for AD9913												AD9913/PCBZ-ND			197.46	—	—
Evaluation Board for AD9954												AD9954/PCBZ-ND			197.46	—	—
Evaluation Board for AD9957												AD9957/PCBZ-ND			276.43	—	—
Evaluation Board for AD9958												AD9958/PCBZ-ND			197.46	—	—

• RoHS Compliant

B

antenna Antennas



Dimensions in mm

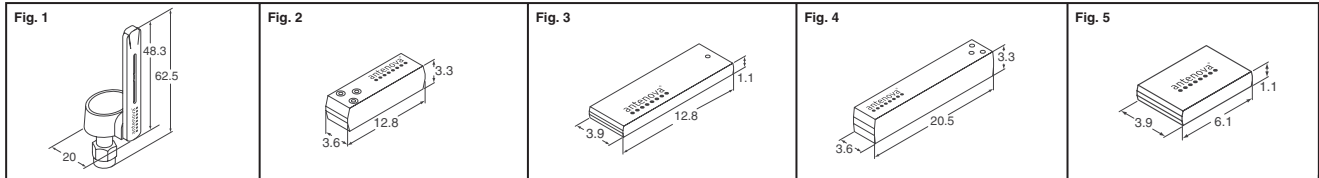
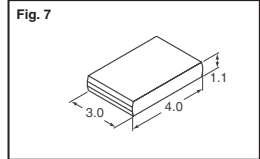
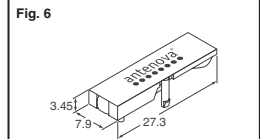


Fig.	Description	Frequency	Gain (Typ. @ 2.4GHz)	Digi-Key Part No.	Cut Tape Price Each			Tape and Reel		Antenna Part No.
					1	25	100	Qty.	Pricing	
Antennas										
1	Titanis Swivel SMA	2.4GHz	4.1dBi	627-1000-ND†	31.76	24.96	18.16	—	—	2010B4844-01
	Titanis Swivel RPSMA	2.4GHz	4.1dBi	627-1001-ND†	27.59	22.87	17.43	—	—	2010B6090-01
2	Comata SMD	2.4GHz	-0.5dBi	627-1010-1-ND	2.76	2.47	2.18	2,000	1016.40/M	3030A6111-01
				627-1011-1-ND	3.46	3.10	2.74	1,000	1184.83	3030A5839-01
3	Rufa SMD	2.4GHz	4.1dBi	627-1012-1-ND	2.76	2.47	2.18	1,000	943.80	3030A5887-01
				627-1009-1-ND	3.81	3.27	2.73	2,000	1452.00/M	3030A5645-01
4	Mica SMD	2.4GHz	1.2dBi	627-1013-1-ND	1.66	1.49	1.31	1,000	435.60	3030A6150-01
				627-1014-1-ND	1.66	1.49	1.31	1,000	435.60	3030A6250-01
6	Flavus Snap-In	2.4GHz	4.0dBi	627-1003-ND†	4.50	4.07	3.63	—	—	1020B5743-01
				627-1016-1-ND	2.53	2.26	1.99	1,000	908.95	A10192-L

0 For Tape and Reel part number, change 1-ND to 2-ND. † Bulk



artaflex WirelessUSB™ Modules



Operating in the 2.4GHz ISM band, the Falcon series modules are based on Cypress's WirelessUSB LP technology. The modules offer low-power consumption and deliver data rates up to 1Mbps, with ranges between 50 meters for print antenna devices up to 1 kilometer for devices equipped with a power amplifier. Additionally, WirelessUSB LP features direct sequence spread-spectrum (DSSS) technology, which provides the industry's most robust immunity for interference from other technologies like 802.11b/g, Bluetooth, cordless phones and microwave ovens. The modules feature a data

transmission rate of up to 1Mbps with an average latency of below 2 milliseconds. The modules are certified with modular grants by the Federal Communications Commission (FCC), the European Telecommunications Standards Institute (ETSI), and Industry Canada, translating into modular approval and eliminating the need to test for RF compliance. • **AWP24S:** WirelessUSB module with print antenna • **AWS24S:** WirelessUSB module with miniature SMA for use with external antenna • **AWA24S:** WirelessUSB and PA module with print antenna • **AWP24U:** WirelessUSB dongle

Features	Data Rates		Range	Operating Current (mA)	Operating Voltage (V)	Dimensions (mm)	Digi-Key Part No.	Price Each			Artflex Part No.
	DSSS (kbps)	GFSK (Mbps)						1	10	100	
Integrated Print Antenna	250	1	50 Meters	21	2.4 - 3.6	38.1 x 25.4	748-1000-ND	9.43	7.26	5.81	AWP24S
External Antenna Connector	250	1	50 Meters	21	2.4 - 3.6	38.1 x 25.4	748-1001-ND	12.33	10.16	7.98	AWS24S
Integrated Power Amplifier	250	1	up to 1 Kilometer	<100	2.4 - 3.6	25.4 x 20.3	748-1003-ND	23.22	18.15	14.52	AWA24S
WirelessUSB Dongle											
Full Speed USB (12Mbps)	250	1	30 Meters	40	5	59 x 20	748-1002-ND	23.22	18.15	14.52	AWP24U

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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