

B

| Master Freq | 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. | 1 | 25 | 100 | Price Each |
|--------------------------------|-------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------|----------------------|----------------------|-------------------|---------------------|------------------|----------|-------------------------------------------------|-------------------------|-------------------------|-------------------------|------------|
| 25MHz | 10 | 32 | Single (+3.3), Single (+3.6), Single (+5.0) | 15mA | 4 | 1.5 | No | No | Parallel | 48-LQFP | AD9831ASTZ-ND | 12.25 | 11.03 | 9.78 | |
| 25MHz | 10 | 32 | Single (+3.3), Single (+3.6), Single (+5.0) | 15mA | 4 | 1.35 | No | No | Serial | 16-TSSOP | AD9832BRUJ-ND AD9832BRUZ-ND | 10.78 9.80 | 9.71 8.82 | 8.61 7.83 | |
| 50MHz | 10 | 32 | Single (+5.0) | 60mA | 20 | 1.0 | No | No | Parallel | 48-TQFP | AD9830ASTZ-ND AD9830ASTZ-ND | 20.19 19.31 | 18.85 18.02 | 17.50 16.74 | |
| 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 | AD9834BRUJ-ND AD9834BRUZ-ND | 10.66 9.70 | 9.60 8.73 | 8.52 7.75 | |
| 75MHz | 10 | 28 | Single (+2.3 to +5.5) | 8.7mA | 3 | 0.8 | No | Yes | Serial | 20-TSSOP | AD9834CRUZ-ND | 11.28 | 10.16 | 9.01 | |
| 50MHz | 10 | 32 | Single (+5.0) | 40mA | 4 | 1.35 | No | No | Serial | 16-TSSOP | AD9835BRUZ-ND | 11.28 | 10.16 | 9.01 | |
| 125MHz | 10 | 32 | Single (+3.3), Single (+5.0) | 96mA | 20 | 1.5 | No | Yes | Parallel, Serial | 28-SSOP | AD9850BRSZ-ND | 21.83 | 20.37 | 18.92 | |
| 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 | 23.93 | 22.33 | 20.74 | |
| 250MHz | 10 | 32 | Single (+1.8) | 63.5mA | 4.6 | 0.8 | Yes | No | Parallel, Serial | 32-LFCSP | AD9913BCPZ-ND NEW! | 17.03 | 15.89 | 14.76 | |
| 300MHz | 12 | 48 | Single (+3.3) | 922mA | 20 | 1.0 | Yes | Yes | Parallel, Serial | 80-LQFP | AD9852ASTZ-ND | 26.93 | 25.13 | 23.34 | |
| 300MHz | 12 | 48 | Single (+3.3) | 1210mA | 10 | 1.0 | Yes | Yes | Parallel, Serial | 80-LQFP | AD9854ASTZ-ND | 29.18 | 27.23 | 25.29 | |
| 400MHz | 10 | 32 | Multi (+1.8, +3.3) | N/A | 20 | 2.05 | Yes | No | Serial | 48-TQFP | AD9859YSVZ-ND | 17.21 | 16.06 | 14.92 | |
| 400MHz | 14 | 32 | 1.8 and 3.3 or 1.8 | N/A | 10 | 2.05 | Yes | No | Serial | 48-TQFP | AD9951YSVZ-ND | 24.26 | 22.64 | 21.03 | |
| 400MHz | 14 | 32 | Multi (+1.8, +3.3), Single (+1.8) | N/A | 10 | 2.05 | Yes | No Yes | Serial | 48-TQFP | AD9952YSVZ-ND AD9953YSVZ-ND AD9954YSVZ-ND | 27.35 26.03 30.44 | 25.53 24.29 28.41 | 23.70 22.56 26.38 | |
| 500MHz | 10 | 32 | Multi (+1.85, +3.3), Multi (+1.8, +3.3) | 105mA 180mA | 10 | 2.3 | Yes | — | Serial | 56-LFCSP | AD9958BCPZ-ND AD9959BCPZ-ND | 35.70 65.52 | 33.32 61.16 | 30.94 56.79 | |
| 1.0GHz | 10 | 32 | Multi (+3.3, +5.0) | N/A | 40 | 3.8 | No | No | Parallel, Serial | 100-TQFP | AD9858BSVZ-ND | 79.64 | 74.33 | 69.02 | |
| 1.0GHz | 14 | 32 | Single (+1.8), Single (+3.3) | N/A | 20 | 0.5 | Yes | No | Parallel, Serial | 100-TQFP | AD9910BSVZ-ND | 61.61 | 57.50 | 53.40 | |
| 1.0GHz | 14 | 48 | Multi (+1.8, +3.3) | 759mA | 20 | 0.5 | Yes | — | Serial | 100-TQFP | AD9957BSVZ-ND | 37.05 | 34.58 | 32.11 | |
| 1.0GHz | 14 | 48 | Multi (+1.8, +3.3) | 394mA | — | 0.5 | Yes | Yes | Serial | 64-LFCSP | AD9912BCPZ-ND | 65.73 | 61.35 | 56.97 | |
| 2.7GHz | 14 | 48 | Multi (+1.8, +3.3) | N/A | 10 | 2.3 | No | No | Serial | 48-LFCSP | AD9956VCPZ-ND | 30.44 | 28.41 | 26.38 | |
| Evaluation Board for AD9831 | | | | | | | | | | | | 146.25 | — | — | |
| Evaluation Board for AD9832 | | | | | | | | | | | | 150.00 | — | — | |
| Evaluation Board for AD9833 | | | | | | | | | | | | 150.00 | — | — | |
| Evaluation Board for AD9834 | | | | | | | | | | | | 150.00 | — | — | |
| Evaluation Board for AD9850/FS | | | | | | | | | | | | 250.00 | — | — | |
| Evaluation Board for AD9910 | | | | | | | | | | | | 376.25 | — | — | |
| Evaluation Board for AD9912 | | | | | | | | | | | | 268.75 | — | — | |
| Evaluation Board for AD9913 | | | | | | | | | | | | 268.75 | — | — | |
| Evaluation Board for AD9954 | | | | | | | | | | | | 268.75 | — | — | |
| Evaluation Board for AD9957 | | | | | | | | | | | | 376.25 | — | — | |
| Evaluation Board for AD9958 | | | | | | | | | | | | 268.75 | — | — | |

• RoHS Compliant

antenna Antennas and GPS Module



Dimensions in mm

| Fig. | Description | Frequency | Gain (Typ. @ 2.4GHz) | Digi-Key Part No. | Cut Tape Price Each | 1 | 25 | 100 | Tape and Reel Qty. | Reel Pricing | Antenna Part No. |
|----------------------------------------------|----------------------------------------|--------------|----------------------|-------------------|---------------------|-------|-------|-------|--------------------|--------------|------------------|
| Antennas | | | | | | | | | | | |
| 1 | Titanis Swivel SMA | 2.4GHz | 4.1dBi | 627-1000-ND† | 43.75 | 34.38 | 25.01 | — | — | — | 2010B4844-01 |
| 2 | Titanis Swivel RPSMA | 2.4GHz | 4.1dBi | 627-1001-ND† | 38.00 | 31.50 | 24.00 | — | — | — | 2010B6090-01 |
| 3 | Picea Swivel | 2.4GHz | 4.1dBi | 627-1002-ND† | 19.00 | 17.00 | 13.00 | — | — | — | 2010B5771-04 |
| 4 | Comata SMD | 2.4GHz | -0.5dBi | 627-1010-1-ND | 3.80 | 3.40 | 3.00 | 2,000 | 1400.00/M | — | 3030A6111-01 |
| 5 | Ruta SMD | 2.4GHz | 4.1dBi | 627-1011-1-ND | 4.77 | 4.27 | 3.77 | 1,000 | 1632.00 | — | 3030A5839-01 |
| 6 | Mica SMD | 2.4GHz | 1.2dBi | 627-1012-1-ND | 3.80 | 3.40 | 3.00 | 1,000 | 1300.00 | — | 3030A5887-01 |
| 7 | Impexa SMD | 2.4GHz | 0.2dBi | 627-1009-1-ND | 5.25 | 4.50 | 3.75 | 2,000 | 2000.00/M | — | 3030A5645-01 |
| 8 | Fluvus Snap-In | 2.4GHz | 4.0dBi | 627-1013-1-ND | 2.28 | 2.04 | 1.80 | 1,000 | 600.00 | — | 3030A6150-01 |
| 9 | Fluvus Snap-In | 2.4 / 5.0GHz | 4.0dBi | 627-1014-1-ND | 2.28 | 2.04 | 1.80 | 1,000 | 600.00 | — | 3030A6250-01 |
| 10 | GPS SMD | 1.575 ±5MHz | -0.5dBi | 627-1003-ND† | 6.20 | 5.60 | 5.00 | — | — | — | 1020B5743-01 |
| 11 | Fusca SMD | 2.4 - 2.5GHz | 0.4dBi | 627-1005-ND† | 8.00 | 6.75 | 5.50 | — | — | — | 1020B5786-01 |
| 12 | GPS SMD | 1.575 ±5MHz | -0.5dBi | 627-1015-1-ND | 8.06 | 7.70 | 6.81 | 1,000 | 2270.00 | — | A10137 |
| 13 | Fusca SMD | 2.4 - 2.5GHz | 0.4dBi | 627-1016-1-ND | 3.49 | 3.12 | 2.74 | 1,000 | 1252.00 | — | A10192-L |
| GPS Antenna Module and Evaluation Kit | | | | | | | | | | | |
| 14 | GPS Module with SiRFstarIII™ | | | 627-1019-ND† | 51.50 | 42.75 | 39.90 | — | — | — | M10214 |
| 15 | Evaluation Kit for SiRFstarIII™ Module | | | 627-1020-ND† | 330.00 | — | — | — | — | — | M10214-K1 |

† Bulk Δ RHCP @ 1575MHz

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 1Mb/s, 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 | | | Artalex 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 | 12.99 | 9.99 | 7.99 | AWP24S |
| External Antenna Connector | 250 | 1 | 50 Meters | 21 | 2.4 - 3.6 | 38.1 x 25.4 | 748-1001-ND | 16.99 | 13.99 | 10.99 | AWS24S |
| Integrated Power Amplifier | 250 | 1 | up to 1 Kilometer | <100 | 2.4 - 3.6 | 25.4 x 20.3 | 748-1003-ND | 31.99 | 24.99 | 19.99 | AWA24S |
| WirelessUSB Dongle | | | | | | | | | | | |
| Full Speed USB (12Mbps) | 250 | 1 | 30 Meters | 40 | 5 | 59 x 20 | 748-1002-ND | 31.99 | 24.99 | 19.99 | 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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