

## ***Product & Services Guide***

**2026  
June**

***12 New Products Released***

**Catalog MMIC Products**

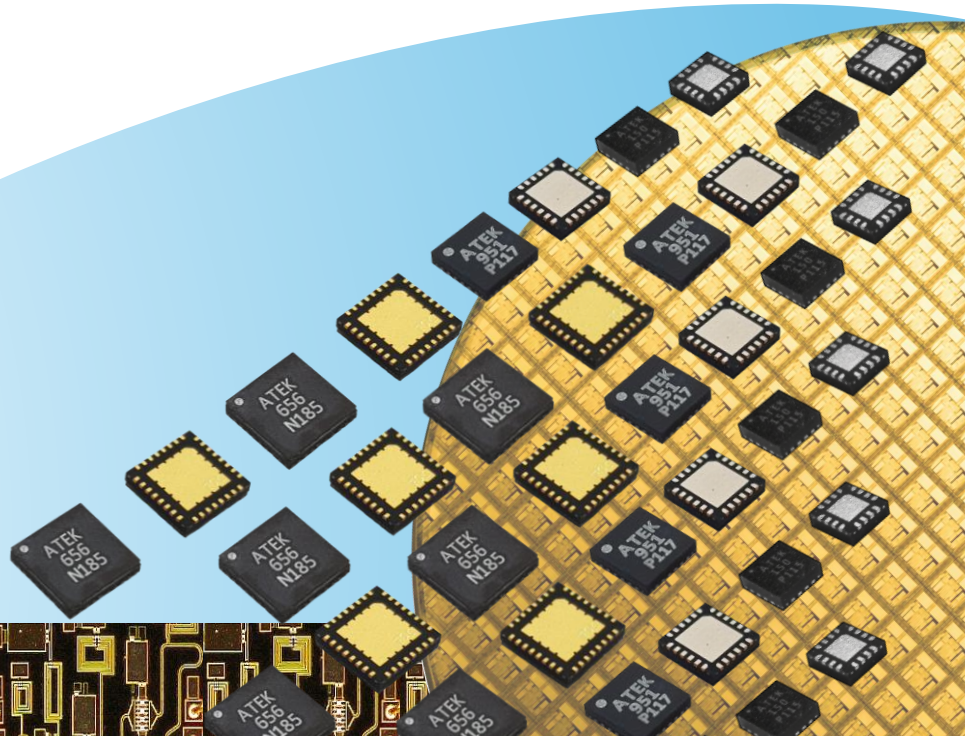
**ASIC Design, IP, & Production Services**

**Integrated Microwave Assemblies & RF Modules**

[sales@atekmidas.com](mailto:sales@atekmidas.com)

***ATEKMIDAS.com***

ATEK-PSG-0626.5



ATEK MIDAS applies novel expertise, creativity, and passion to design high performance analog, mixed-signal ASICs & RFICs and advanced GaAs & GaN MMICs & Modules for Aerospace, Automotive, Communication, Data Center, Defense, Industrial, Medical, Scientific, and Test & Measurement markets.

From our founding in 2017, we partner with our customers to provide focused **IC design and development services delivering IP blocks** to engineering prototypes to turn-key production solutions complemented by our line of **MMIC standard products** for communication and sensor applications to 100 GHz.

Our 400m<sup>2</sup> (4305sf) design and test facility has digital, mixed-signal, and small & large signal RF measurement capability, including environmental testing from -55°C to +125°C. We can characterize & production test SMT packaged products as well as probe wafer/die products through 110 GHz.



**We engage with high quality wafer fabs, IC assembly & test suppliers to assure our customers a secure source of supply.** We are ISO9001:2015 certified by TÜV.

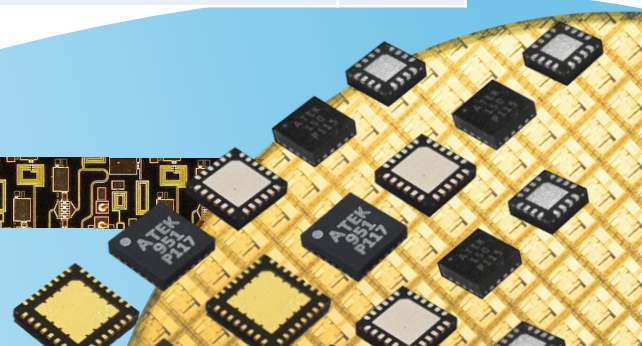
Headquartered in Istanbul, TÜRKİYE our cross functional team of engineers, operations and sales collaborate easily with customers and vendors worldwide.

In 2026 ATEK MIDAS and ViNo Waves have strengthened their partnership with the transition of ViNo Waves to **ATEK America LLC**. The USA based ATEK America will drive sales, marketing, technical, and operations activities for ATEK MIDAS' advanced analog & mixed-signal ASICs, RFICs, and MMICs for Americas customers.

## 12 New MMIC Products - June 2026

ATEK MIDAS is pleased to introduce our June 2026 Products & Services Guide summarizing over 50 MMIC products including 12 new products summarized below. **Our New Product Plan is driven by customer and market input.**

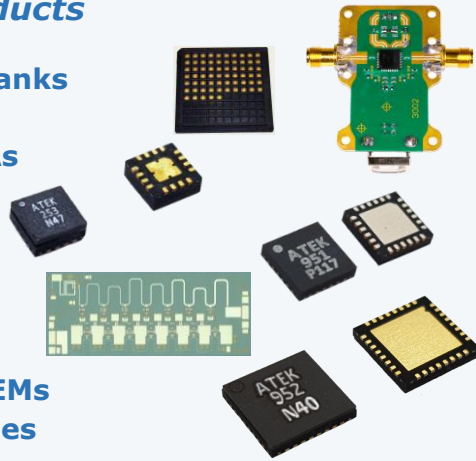
Product Line	Part Number	Description	Package (mm)
Amplifiers - Drivers	ATEK564	5 – 22 GHz Driver Amp, +21dBm P1dB, 24dB Gain	Bare Die
Amplifiers - Drivers	ATEK569	0.2 – 26 GHz Driver Amp, +25.5dBm P1dB, 14dB Gain	Bare Die
Amplifiers - LNAs	ATEK177P4	2 – 20 GHz High IP2 LNA, +45dBm OIP2, 2.3dB NF, 25dB Gain	4x4 QFN
Amplifiers - LNAs	ATEK178P4	5 – 20 GHz High IP2 LNA, +60dBm OIP2, 4.5dB NF, 17dB Gain	4x4 QFN
Amplifiers - PAs	ATEK581N5	8 - 12 GHz GaN Power Amp, 17W, 42% PAE, 32dB Gain	5x5 QFN
Amplifiers - PAs	ATEK584P4	2 - 6 GHz GaN Power Amp, 2.5W, 30% PAE, 25dB Gain	4x4 QFN
Filters – Switched BPF	ATEK672N5	2 – 18 GHz Switched 8 BPF Bank w/Bypass, -45dBc Rejection	5x5 QFN
Filters – Digitally Tunable	ATEK897N4	18 – 26 GHz Digitally Tunable 256 State BPF, 8-Bit GPIO	4x4 QFN
Switches - SPDT	ATEK273AN4	DC – 18 GHz SPDT GaN Switch, 15W P0.3dB, 1.2dB IL, 40dB ISO	4x4 QFN
Switches - SPDT	ATEK274N4	6 – 18 GHz SPDT GaN Switch, 20W P0.3dB, 0.7dB IL, 36dB ISO	4x4 QFN
Filters – Switched Module	ATEK1601	2 – 18 GHz Switched 6 BPF Bank, -45dBc Rejection	Module
Filters – Digitally Tunable Module	ATEK1801	50 – 530 MHz Digitally Tunable 32 State LPF, 5-Bit GPIO	Module



**Products & Services**

**Catalog MMIC Products**

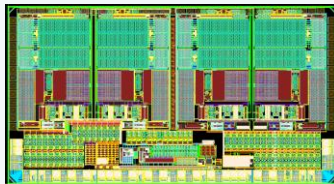
- ✓ Switched Filter Banks
- ✓ Tunable Filters
- ✓ LNAs, Drivers, PAs
- ✓ Attenuators
- ✓ Equalizers
- ✓ Passives
- ✓ Phase Shifters
- ✓ Switches
- ✓ Transceivers & FEMs
- ✓ Die, SMT & Modules



**Customization & Screening Available**

**ASIC Design, IP & Production Services**

- ✓ RFICs & MMICs
- ✓ Optical ICs & CDRs
- ✓ ADCs & DACs
- ✓ PMICs & Buck/Boost
- ✓ IP Blocks
- ✓ SiGe BiCMOS, SOI, RFCMOS, BCD & MEMS
  - ✓ 130nm to 12nm
- ✓ GaAs, GaN/SiC & InP
  - ✓ 0.5µm to 0.1µm



**Our Expertise Delivers Price/Performance Value**

**Integrated Microwave Assemblies & RF Modules to 50 GHz**

- ✓ Connectorized Modules
- ✓ Wideband Converters
- ✓ Transceivers & Synthesizers
- ✓ High Power Amplifiers
- ✓ OTA Test Systems
- ✓ Spectrum Monitoring
- ✓ DF, IFF & SIGINT
- ✓ Custom Software



**MCMs, Pallets, Sub-Systems & Rack Mount**

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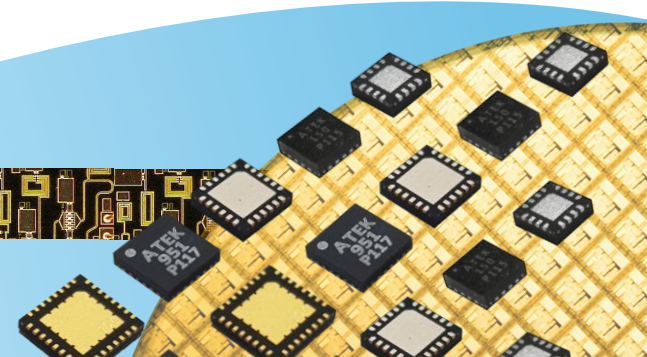
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- ATEK America Representatives*
- Distributors*



The **Switched Filter Bank and Tunable Filter MMIC Products** from ATEK MIDAS offer a very competitive combination of **SWaP performance and price**. We have produced dozens of custom BPF, LPF, and HPF MMIC filters which can be found on our website. For customers requiring a tailored frequency scheme, ATEK MIDAS can quickly draw from our existing portfolio to produce and quickly deliver a multi-function filter MMIC. **Contact us!**

### Filters – Switched Bandpass Filter Banks

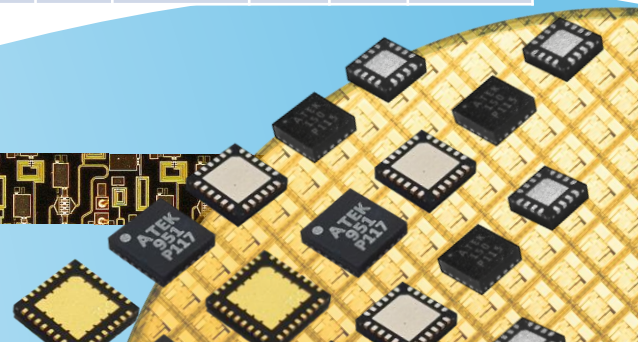
Family	Part Number	Description	Filter Band	Cutoff Freq Low (MHz)	Cutoff Freq High (MHz)	Loss (dB)	Rejection (dBc)	IIP3 / P1dB (dBm)	Tuning Speed (ns)	Bias Supply	Package (mm)
Switchable Band Pass Filter Bank	ATEK656N5	2 to 18 GHz Sub-Octave 6 BPF Bank 3-Bit, 0/-5V Control	1	1900	3500	6.5	35	33 / 23	150	-5V @ 12mA	5x5 QFN
			2	2800	5400						
			3	4500	9100						
			4	7100	12300						
			5	9900	15300						
			6	12500	18000						
NEW! Switchable Band Pass Filter Bank	ATEK672N5	2 to 18 GHz Sub-Octave 8 BPF Bank Bypass Path 4-Bit, + Control	1	1700	4300	7.5	45	43 / 26	<200	+5V @ 16mA	5x5 QFN
			2	3500	6400						
			3	5500	8500						
			4	7300	10600						
			5	9000	12900						
			6	11100	14900						
			7	12400	17400						
			8	14800	19500						
Switchable Band Pass Filter Bank	ATEK950P6	485 to 8000 MHz Sub-Octave 7 BPF Bank Bypass Path 3-Bit, + Control	1	485	810	6	45	43 / 27.5	150	+5V @ 12mA	6x6 QFN
			2	670	1125						
			3	960	1670						
			4	1440	2560						
			5	2140	3850						
			6	3300	5880						
			7	4820	8500						
			Bypass	2	9000						

### Filters – Analog & Digitally Tunable LPF, HPF, BPF

Family	Part No	Description	Filter States	Fmin (MHz)	Fmax (MHz)	Loss (dB)	Rejection (dBc)	IIP3 (dBm)	Speed (ns)	Package (mm)
Digital BPF	ATEK884P5	1 to 7.5 GHz, 10-Bit GPIO	32	1000	7500	11	40	TBD	260	5x5 QFN
Analog BPF	ATEK873N4	8 to 18.5 GHz, 0 to +8V CTL	Analog	8	18500	7	55	28	100	4x4 QFN
Digital LPF	ATEK821P4	1 to 2.5 GHz, 4-Bit GPIO	15	1000	2500	2.5	50	45	130	4x4 QFN
Digital LPF	ATEK822P4	0.35 to 1.1 GHz, 4-Bit GPIO	15	350	1100	2.5	40	45	150	4x4 QFN
Digital LPF	ATEK889P4	1.5 to 3.35 GHz, 4-Bit GPIO	16	1500	3350	3	60	40	130	4x4 QFN
Digital LPF	ATEK888P5	20 to 530 MHz, 5-Bit GPIO	32	20	530	2	45	44	250	5x5 QFN
Digital HPF	ATEK890P4	1.0 to 1.95 GHz, 4-Bit GPIO	16	1000	1950	2	55	52	130	4x4 QFN
NEW! Digital BPF	ATEK897N4	18 to 26 GHz, 8-Bit GPIO	256	18000	26000	6.5	40	40	<200	4x4 QFN

Notes:

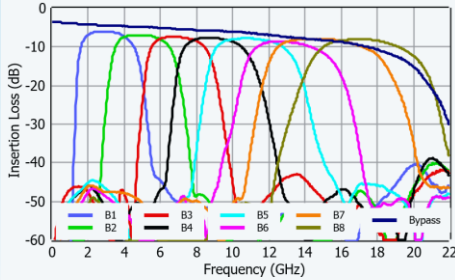
1. All Digital Tunable Filters have a single bias of V<sub>dd</sub>=+5V drawing <10mA.
2. All MMIC Switched & Tunable Filters have a standard operating range of -40°C to +85°C. Contact us for extended operating range of -55°C to +105°C or +125°C.



## Featured MMIC Filters

### ATEK672N5 **NEW!**

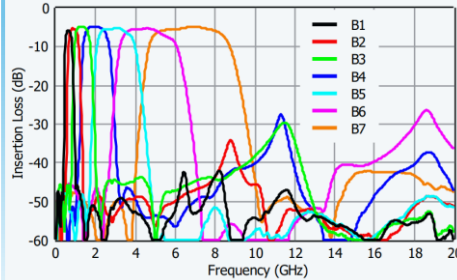
**Switched Sub-Octave BPF  
2 – 18 GHz + Bypass**



- 8 Switchable BPFs
- <200nS Tuning Speed
- +43dBm IIP3
- +25dBm P1dB
- 45dBc Rejection

### ATEK950P6

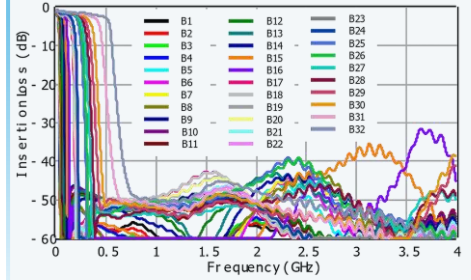
**Switched Sub-Octave BPF  
0.485 to 8.0 GHz + Bypass**



- 7 Switchable BPFs
- 150nS Tuning Speed
- +43dBm IIP3
- +25dBm P1dB
- 45dBc Rejection

### ATEK888P5

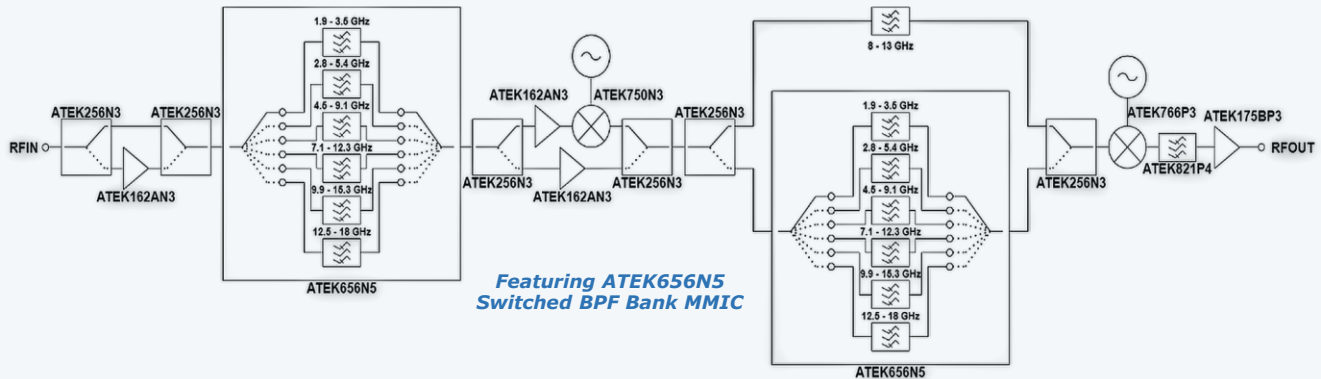
**Digitally Tunable LPF  
20 – 530 MHz**



- 32 States, 8-Bit GPIO
- 250nS Tuning Speed
- 2dB Insertion Loss
- +44dBm Input IP3
- 45dBc Rejection

## MMIC Filter Applications

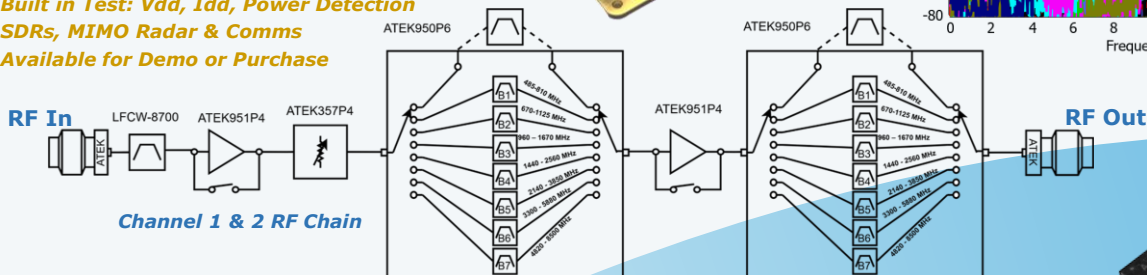
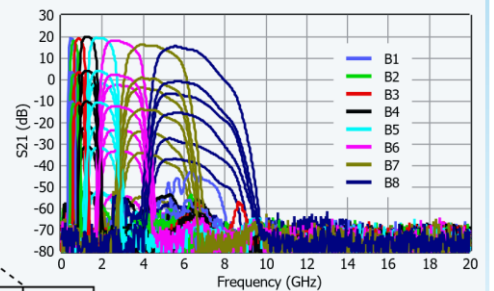
### 2 to 18 GHz Switched Tuned Receiver Filter Bank Application



### ATEK1421 Dual Channel 485 MHz to 6 GHz FEM

**Demonstrates How ATEK MMIC Filters  
Enhance Front End Performance of  
Wideband MMIC Transceivers**

- ✓ 65 dB SFDR for 10 MHz BW, +6Vdc @ 3W
- ✓ Switched MMIC Filters: ATEK950P6
- ✓ 17.5dB Gain & 8dB NF: ATEK951P4 LNAs
- ✓ 0 to 31dB, 1dB steps: ATEK357P4 DSA
- ✓ Ethernet with TCP/IP & USB(C) VCP
- ✓ Built in Test: Vdd, Idd, Power Detection
- ✓ SDRs, MIMO Radar & Comms
- ✓ Available for Demo or Purchase



### Amplifiers – LNAs

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	NF (dB)	Gain (dB)	P1dB (dBm)	OIP3 (dBm)	Vdd (V)	Idd (mA)	Package (mm)	
LNA	ATEK150P3	WB LNA	0.01	8	1.5	21	17	31.5	5	83	3x3 QFN	
LNA	ATEK161	WB LNA	1	26	1.8	15.5	15	24	5	55	DIE	
LNA	ATEK161P5	WB LNA	1	24	2	15	14	24	5	65	5x5 QFN	
LNA	ATEK162AN3	WB LNA	2	22	3	20	18	28	5	76	3x3 QFN	
LNA	ATEK163P3	WB LNA	8	16	1.6	16	14.5	27.5	3	58	3x3 QFN	
LNA	ATEK169P3	LNA	DC	8	1.3	17	20.5	31	5	75	3x3 QFN	
LNA	ATEK175BP3	LNA	DC	3	0.7	22	20	20	5	58	3x3 QFN	
<b>NEW!</b>	LNA	ATEK177P4	LNA High IP2	2	20	2.3	25	20	45 OIP2	4	200	4x4 QFN
<b>NEW!</b>	LNA	ATEK178P4	LNA High IP2	5	20	4.5	17	20	60 OIP2	4	160	4x4 QFN
LNA	ATEK951P4	Bypass LNA	0.01	8	2.5	18	17	30	5	82	4x4 QFN	

### Amplifiers – Drivers & Gain Blocks

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	Gain (dB)	P1dB (dBm)	OIP3 (dBm)	Vdd (V)	Idd (mA)	Package (mm)	
<b>NEW!</b>	Driver	ATEK564	5 – 22 GHz	5	22	24	21.5	30.5	5	123	DIE
	Driver	ATEK564AN3	5 – 22 GHz	5	22	23	21.5	30.5	5	123	3x3 QFN
	Driver	ATEK564P3	5 – 20 GHz	5	20	20	20.5	30.5	5	123	3x3 QFN
<b>NEW!</b>	Driver	ATEK569	0.2 – 26 GHz	0.2	26	14	25.5	36	10	190	DIE
	Driver	ATEK569N5	0.2 – 26 GHz	0.2	26	14	25.5	35	10	190	5x5 QFN
	Driver	ATEK569P5	0.2 – 24 GHz	0.2	24	14	22.5	36	10	150	5x5 QFN
	Gain Block	ATEK590P2	DC – 3 GHz	DC	3	20	19.5	33	5	92	2x2 DFN

### Amplifiers – Power

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	Gain (dB)	Pout (W)	OIP3 (dBm)	PAE	Vdd (V)	Idq (mA)	Package (mm)
HPA WB	ATEK563P5	0.2 – 24 GHz 0.5W PA	0.2	24	12	0.5	40	21%	10	370	5x5 QFN
<b>NEW!</b>	HPA	ATEK581N5	8 – 12 GHz 17W PA	8	12	32	17	42%	24 to 32	200	5x5 QFN
<b>NEW!</b>	HPA	ATEK584P4	2 – 6 GHz 2.5W PA	2	6	25	2.5	30%	20 to 28	40	4x4 QFN

### Equalizers – Digital Step

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	Loss (dB)	Slope Step Range (dB)	IIP3 (dBm)	Vdd / Control Voltage	Package (mm)
Equalizer	ATEK900N3	2-bit	DC	18	1	0, 2, 4, 6	40	+5V & 0/+5V	3x3 QFN

*Our SMT products are also available as die products. Contact us to request a quote!*



### Attenuators – Digital Step & Voltage Variable

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	Loss (dB)	Atten Range (dB)	Step (dB)	IP1dB (dBm)	IIP3 (dBm)	Vdd/Control Voltage	Package (mm)
DSA	ATEK357P4	5-bit, 1 to 31dB	DC	20	4	31	1	TBD	43	+5V & 0/5V	4x4 QFN
VVA	ATEK350AN4	Analog	2	40	1.8	46	N/A	19	30	0 to -3V	4x4 QFN
VVA	ATEK350AP4	Analog	DC	36	1.9	37	N/A	19	30	0 to -3V	4x4 QFN

### Frequency Conversion - Mixers

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	Loss (dB)	LO Drive (dBm)	IIP3 (dBm)	Package (mm)
Mixer	ATEK766P3	6 – 18 GHz Mixer, DC – 8.5 GHz IF	6	18	7	+10 to +13	+16	3x3 QFN

### Passives – Power Dividers / Combiners

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	Insertion Loss (dB)	Isolation (dB)	Amplitude Imbalance (dB)	Phase Imbalance (deg)	Package (mm)
Divider	ATEK848P3	2 Way Power Divider / Combiner	DC	26	3.9	22	0.2	1.5	3x3 QFN
Divider	ATEK850P3	2 Way Power Divider / Combiner	DC	20	4.0	23	0.1	1.0	3x3 QFN
Divider	ATEK853P3	2 Way Power Divider / Combiner	DC	9	3.6	20	0.1	0.7	3x3 QFN
Divider	ATEK854P3	2 Way Power Divider / Combiner	6	36	4.2	20	0.2	3.0	3x3 QFN

### Phase Shifters - Analog

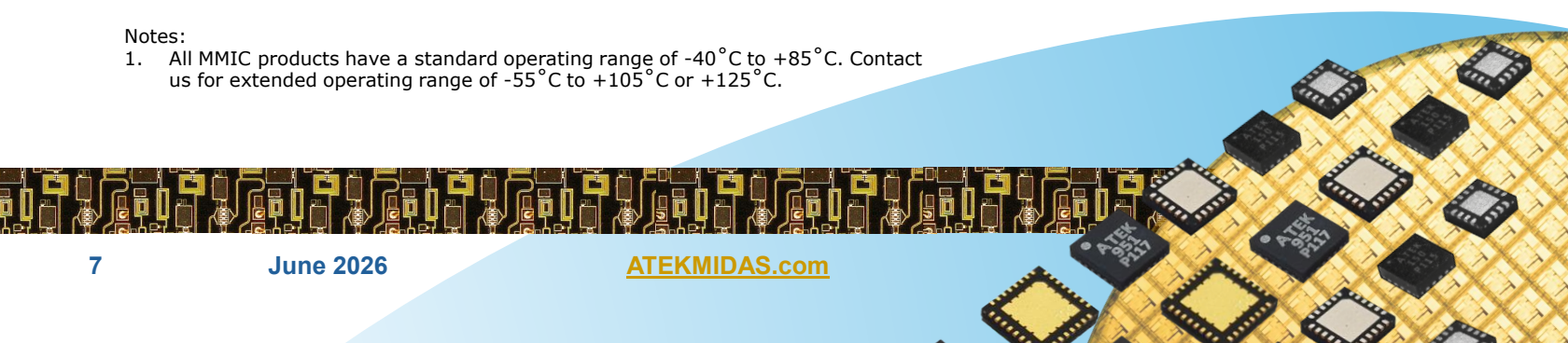
Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	Loss (dB)	Range (degrees)	Step (dB)	RL (dB)	Control Voltage	Package (mm)
APS	ATEK366P5	Analog	2	18	5	0 - 180	N/A	8	0 to +10V	5x5 QFN
APS	ATEK367P4	Analog	2	4	3	0 - 375	N/A	12	0 to +10V	4x4 QFN

### Switches – SPDT, SP4T, SP8T

Family	Part No	Description	Fmin (GHz)	Fmax (GHz)	IL (dB)	ISO (dB)	IP1dB (dBm)	IIP3 (dBm)	Control Voltage	Package (mm)
SPDT	ATEK250P3	Absorptive	DC	14	1.5	43	27	44	Positive	3x3 QFN
SPDT	ATEK252P3	Absorptive	DC	27	2	50	25	47	Negative	3x3 QFN
SPDT	ATEK253N3	Absorptive	DC	32	1.8	50	18	39	Negative	3x3 QFN
SPDT	ATEK256N3	Absorptive	DC	20	1.8	45	24	40	Positive	3x3 QFN
SPDT	ATEK256P3	Absorptive	DC	18	2.2	43	24	40	Positive	3x3 QFN
<b>NEW!</b> SPDT	ATEK273AN4	GaN Reflective	DC	18	1.2	40	41.8	40	-28V to -40V	4x4 QFN
<b>NEW!</b> SPDT	ATEK274N4	GaN Reflective	6	18	0.7	36	43	40	-28V to -40V	4x4 QFN
SP4T	ATEK264N4	Reflective	DC	24	1.5	50	25	43	Negative	4x4 QFN
SP4T	ATEK271	Absorptive	DC	22	1.7	43	23	35	Negative	DIE
SP8T	ATEK258P4	Absorptive	DC	12	2	52.5	28	46	Positive	4x4 QFN

Notes:

- All MMIC products have a standard operating range of -40°C to +85°C. Contact us for extended operating range of -55°C to +105°C or +125°C.



ATEK MIDAS catalog **Connectorized Modules** utilize our standard catalog MMICs. We offer custom module versions of any of our single function MMICs as well as “customer choice” multifunction configurations. All products operate -40°C to +85°C and utilize rugged RF SMA female connectors. Data shown below is mid-band at +25°C.

*Contact us to for your custom module requirements!*

Function	Part No	Description	Filter Band	Fmin (MHz)	Fmax (MHz)	Loss (dB)	Rejection (dB)	IIP3 (dBm)	Tuning Speed (ns)	USB Supply (mA)
Switchable Band Pass Filter Bank	ATEK1001	485 to 8000 MHz Pre-Selector Module USB Control	1	485	810	6.5	45	+43	150	20
			2	670	1125					
			3	960	1670					
			4	1440	2560					
			5	2140	3850					
			6	3300	5880					
			7	4820	8500					
			Bypass	2	9000	3.5	N/A			
NEW! Switchable Band Pass Filter Bank	ATEK1601	2 to 18 GHz Pre-Selector Module, USB & Button Control, OLED Display	1	1900	3500	6.5	35	+33	150	20
			2	2800	5400					
			3	4500	9100					
			4	7100	12300					
			5	9900	15300					
			6	12500	18000					
NEW! Digitally Tunable Low Pass Filter	ATEK1801	20 to 530 MHz 32 LPF State Module, USB & Button Control, OLED Display	32 States	20	530	2.0	45	+44	250	20

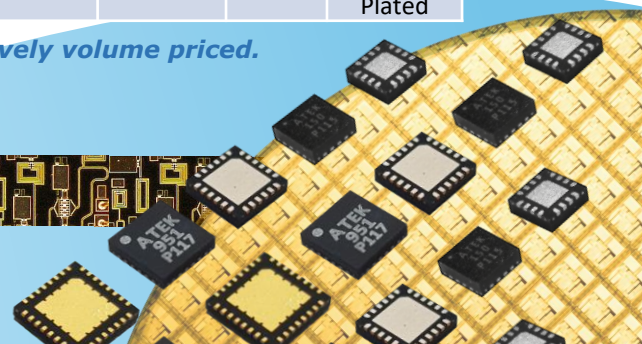
Function	Part No	Description	Fmin (GHz)	Fmax (GHz)	Loss (dB)	Isolation (dB)	IP1dB (dBm)	IIP3 (dBm)	Supply
SPDT Absorptive Switch	ATEK1201	DC to 28 GHz High Isolation SPDT Module CMOS Control	DC	28	2.1	45	+18	+39	+5V @ 7.5mA
SPDT Absorptive Switch	ATEK1202	DC to 24 GHz High Isolation SPDT Module CMOS Control	DC	24	2.1	48	+25	+46	+5V @ 7.5mA

Function	Part No	Description	Fmin (GHz)	Fmax (GHz)	Loss (dB)	State Error (dB)	IP1dB (dBm)	IIP3 (dBm)	USB Supply (mA)
5-Bit Digital Step Attenuator	ATEK1231	DC to 18 GHz 1 to 31dB Step DSA Module USB Control	DC	18	4.3	0.7	+27	+43	40mA

ATEK MIDAS offers our in-house designed **2.92mm End Launch Connector** that is precision fabricated at a high-quality connector manufacturer. A two-connector evaluation board is available.

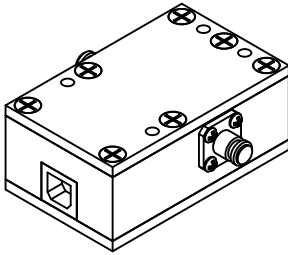
Function	Part No	Description	Fmin (GHz)	Fmax (GHz)	Loss (dB)	Return Loss (dB)	Body	Contact
Connector	ATEK9292	DC to 40 GHz 2.92mm PCB End Launch Connector, Solder Free Interconnect, < 7 grams	DC	40	0.43	23	Brass Nickel	Beryllium Cu, Au Plated

*The connector is offered from stock & competitively volume priced.*

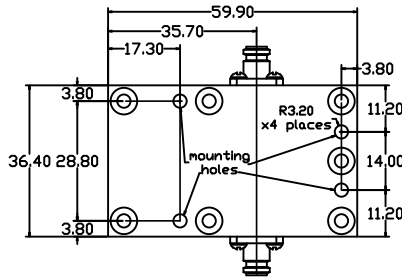


### ATEK1001/1231

### SMA-F Connectorized Module (36.4 x 59.9 x 24.8mm)



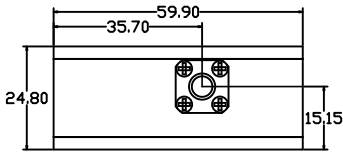
3D View



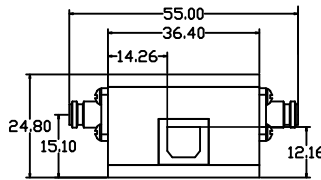
Top View



ATEK1601 & ATEK1801 (41.2 x 28.4 x 18.0mm)

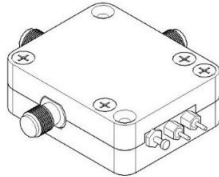


Side View A

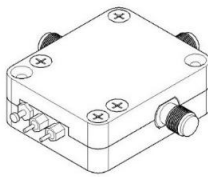


Side View B

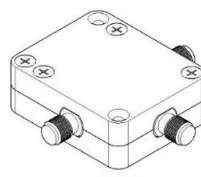
### ATEK1201/1202 SMA-F Connectorized Module (48.9 x 54.0 x 14.2 mm)



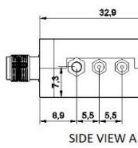
3D VIEW



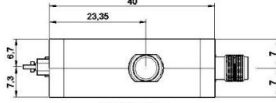
3D VIEW



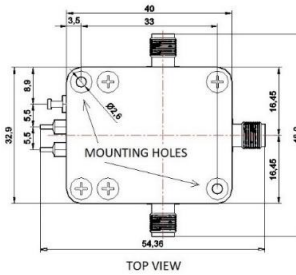
3D VIEW



SIDE VIEW A



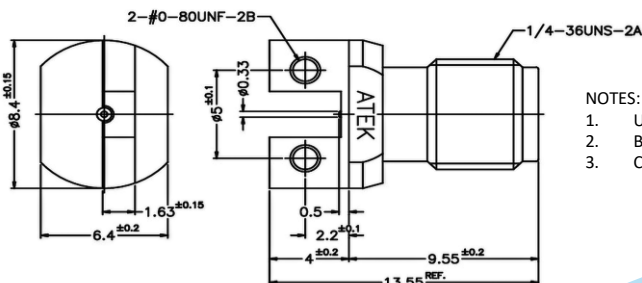
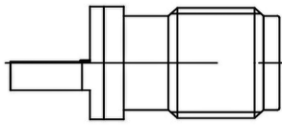
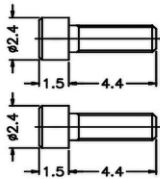
SIDE VIEW B



TOP VIEW

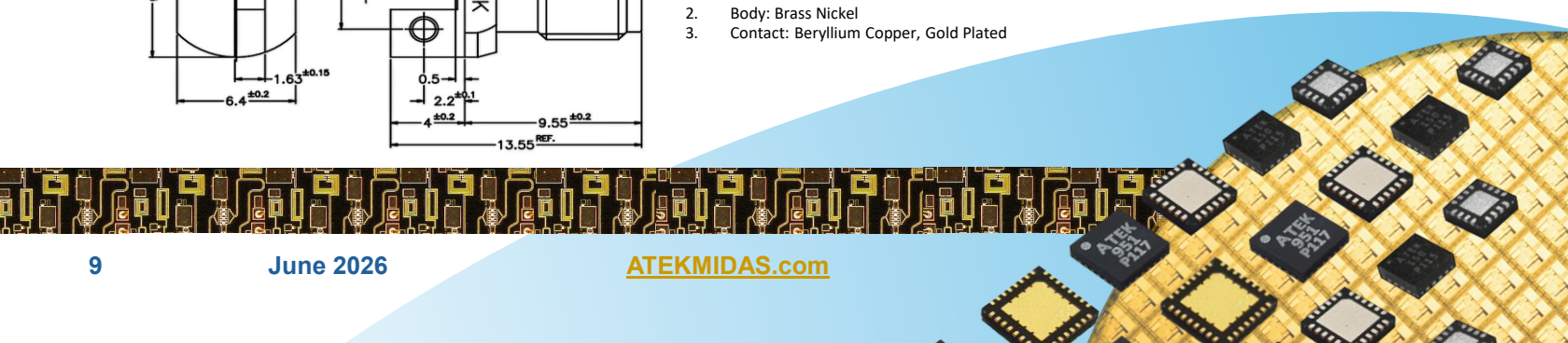
### ATEK9292

### 2.92mm End-Launch Connector



NOTES:

- Units: millimeters
- Body: Brass Nickel
- Contact: Beryllium Copper, Gold Plated



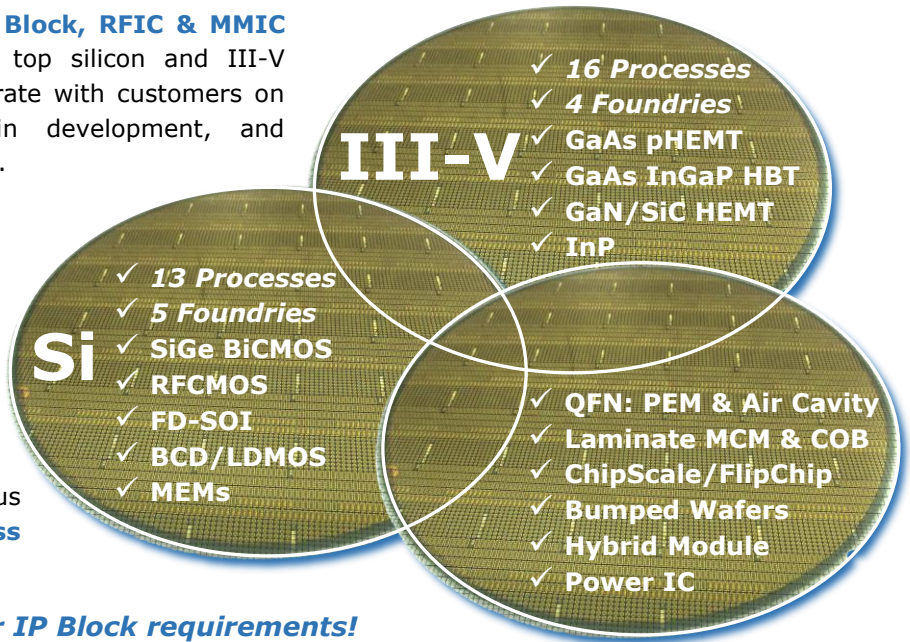
**We are Innovators Rather than Followers  
Driven by a Revolutionary Solutions Approach to IC Design**

ATEK MIDAS offers a broad range of **ASIC, IP Block, RFIC & MMIC design to production services** utilizing the top silicon and III-V foundries and IC packaging houses. We collaborate with customers on product concept, specifications, supply chain development, and **manufacture of prototypes to full production.**

**As a fabless semiconductor leader,** we apply our deep knowledge of materials, device physics, electrical design, systems analysis, packaging & test, reliability, and vendor management to assure a successful development experience for our customers, **delivering exemplary price & performance value.**

Our IC development process is robust, helping us to execute new designs as well as **address obsolescence/EOL to de-risk designs.**

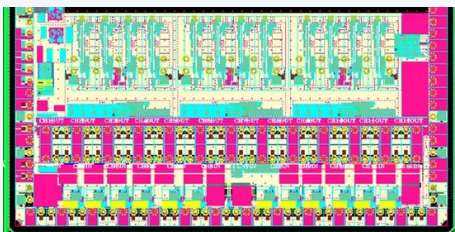
**Contact us today to discuss your ASIC or IP Block requirements!**



**ASIC Core IP: Analog, Digital, Optical, Power, Timing & RF/Microwave**

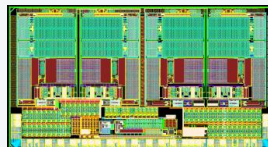
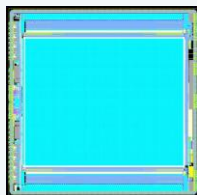
**Optical to 1.6Tbps  
CMOS, SiGe**

- ✓ **LIDAR / Communications**
  - Transimpedance Amplifiers
  - Laser Drivers
  - Line Equalizers
  - Analog Front Ends (AFE)
  - Time of Flight (ToF) AFE
- ✓ **SERDES, Signal Conditioning, CDRs & PLLs (PAM4, NRZ)**
- ✓ **Optical IC Projects:**
  - 56 Gbps PAM Transmitter
  - 300 MHz Automotive TIA
  - 8Ch 35 GHz TIA & Driver
  - 64 Ch TIA w/ADC Buffer
  - LIDAR Automotive AFE+DAC
  - 28 GHz CDR
  - Multi-Channel Medical AFE



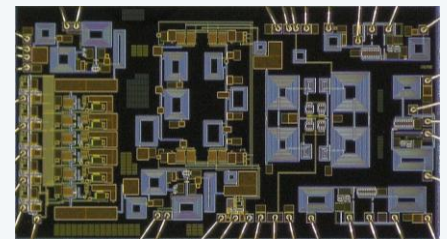
**Analog, Digital & Power  
CMOS, BCD, SiGe**

- ✓ **Digital Design**
  - RTL Synthesis
  - 100k Gate Place & Route
  - Digital Backend Services
  - UVM Standard Framework
- ✓ **SoC Design**
- ✓ **CPU/FPGA Integration**
- ✓ **Power Management**
  - LDO Regulators & PMICs
  - Buck/Boost Converters
- ✓ **ADCs/DACs, PLLs, REF GEN**
- ✓ **Mixed-Signal/Power Projects**
  - DDR4 PHY 600MHz Quad-Phase Clock, Space-Qualified
  - 10-Bit 2 Gbps ADC
  - High Voltage Drop Out Circuit

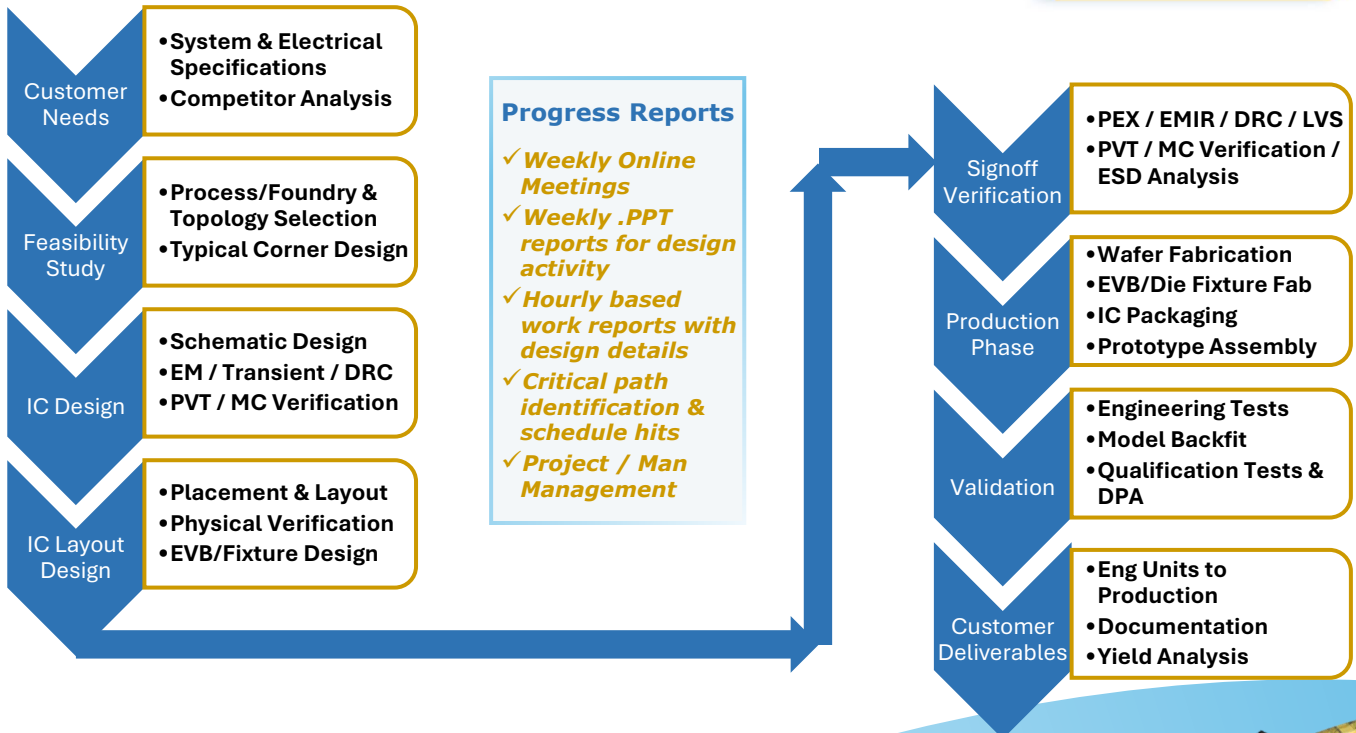
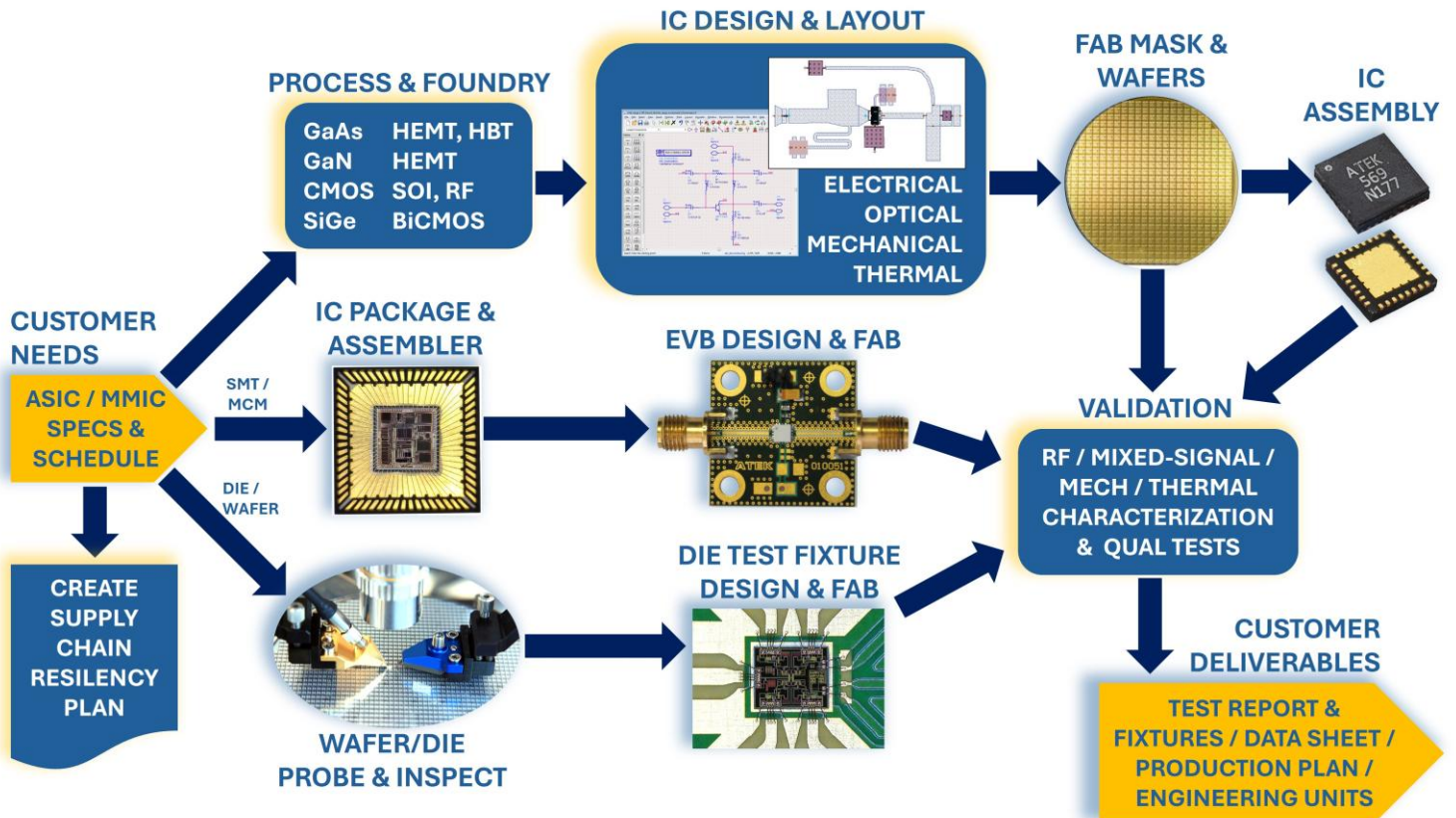


**MMICs/RFICs to 100GHz  
CMOS, SiGe, SOI, GaAs, GaN**

- ✓ **PAs, LNAs, VGAs, Logarithmic**
- ✓ **Switched & Tuned Filters**
- ✓ **Up/Downconverters**
- ✓ **Synthesizers, VCOs, PLLs**
- ✓ **Power Detectors**
- ✓ **Switches: SPnT & MxN**
- ✓ **Attenuators & Phase Shifters**
- ✓ **RFIC/MMIC Projects**
  - UWB RFCMOS Transceiver
  - WiFi7 SOI FEM w/SPI
  - X-Band GaAs & GaN FEM
  - Antijam GPS Receiver



**IC Design & Development Process**



***We Vertically Integrate ICs, Modules & Sub-Systems  
to Achieve Performance that Empowers Our Customers to Win***

ATEK MIDAS leverages a portfolio of standard and custom ASIC, RFIC & MMIC products to develop custom RF Modules and Integrated Microwave Assemblies (IMAs) for a wide range of customer applications. **We combine custom GaAs, GaN & silicon IC design capabilities with COTS components** to provide performance-driven **SWAP-C-optimized** modules in the DC to 95 GHz frequency range.

**Our Areas of Expertise Encompass:**

- ✓ **Transceivers & Converters to 95 GHz**
- ✓ **High Power, Low Noise & Driver Amplifiers**
- ✓ **Fixed or Tunable Filters, Switched Filter Banks**
- ✓ **High Power RF Switching Systems**
- ✓ **PLLs, DDS & Direct Analog Synthesizers**
  
- ✓ **HF/VHF/UHF DF Systems**
- ✓ **C,S, X, Ku-band Radars & RWRs**
- ✓ **Digitizers: IF>1GHz, RF>26GHz, Data>10Gbps**
  
- ✓ **Digital & Analog Control & Power Management**
- ✓ **AGC Algorithms & Built-in Tests**
- ✓ **EMI/EMC Design, Lightning & ESD Protection**
- ✓ **Defense & Space Qualified Designs**

Our customers utilize our technologies in a variety of automotive, communication, IoT/industrial, radar, test bench, OTA test sites, aerospace, and defense applications.

Our team has **expertise in RF system architecture design, evaluation and debugging**. We can provide a complete system by pairing the RF/microwave front end with data conversion back end and power management.

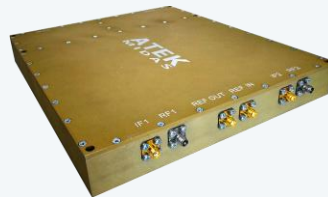
We can package any of our standard or custom IC products in a connectorized RF/microwave module housing. **Available custom multi-function product form factors include; Laminate MCM, Pallet, Sub-System MIC Hybrid Module, Sub-System COTS PCB, Bench Top, or Rack Mount.**

**IMA Sub-System & RF Module Examples**



**ATEK1004 0.5 to 18 GHz  
Up/Downconverter**

- ✓ **1 GHz Instantaneous BW**
- ✓ **High Dynamic Range**
- ✓ **Flexible IF Selection**
- ✓ **Frequency Agile – Dual Conversion Architecture**
- ✓ **MMIC Filter Configuration Yields Higher SFDR**



**0.5 to 40 GHz  
Up/Downconverter**

- ✓ **1.5 GHz Instantaneous BW**
- ✓ **Upconverter Gain: 20dB**
- ✓ **Downconverter Gain: 25dB**
- ✓ **60dB Tx & Rx Attenuation Range**
- ✓ **10dB NF @ 18 to 40 GHz**

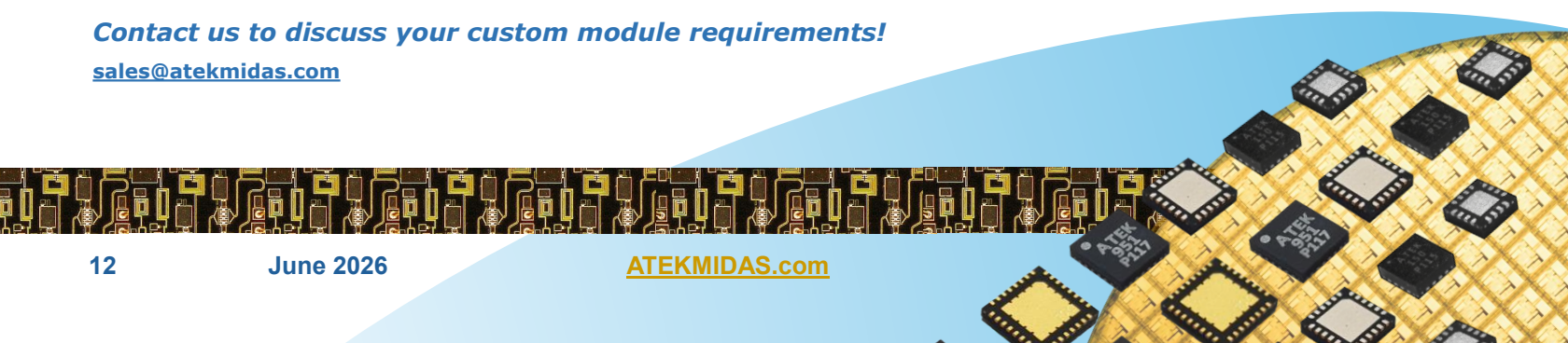


**RF/Microwave Modules  
DC to 40 GHz**

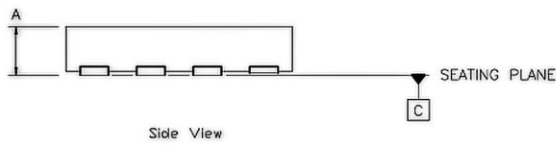
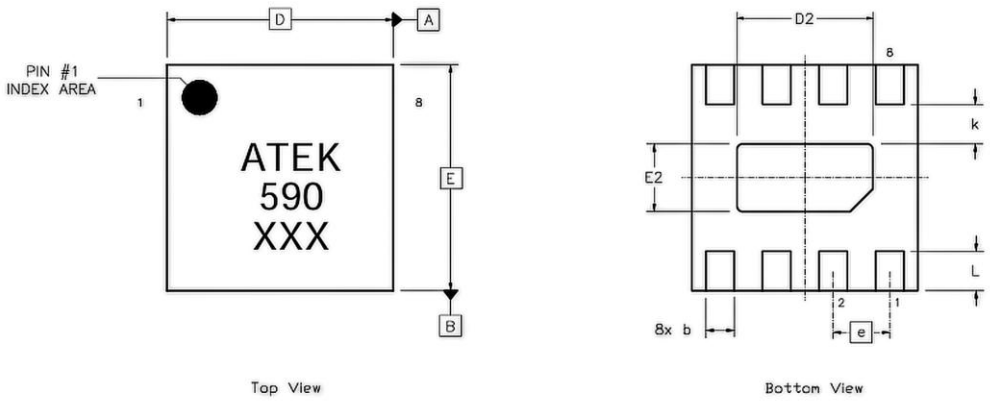
- ✓ **Switches: SPnT & MxN**
- ✓ **Preselectors**
- ✓ **PAs, LNAs & Drivers**
- ✓ **Phase Shifters & Attenuators**
- ✓ **Front End Modules: L to Ku Band**
- ✓ **Integrated USB Control, Power Management & Display**
- ✓ **Non-Hermetic or Hermetic**

**Contact us to discuss your custom module requirements!**

[sales@atekmidas.com](mailto:sales@atekmidas.com)



### P2 2x2mm 8 Lead DFN Package

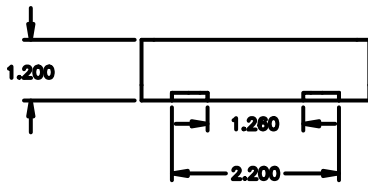
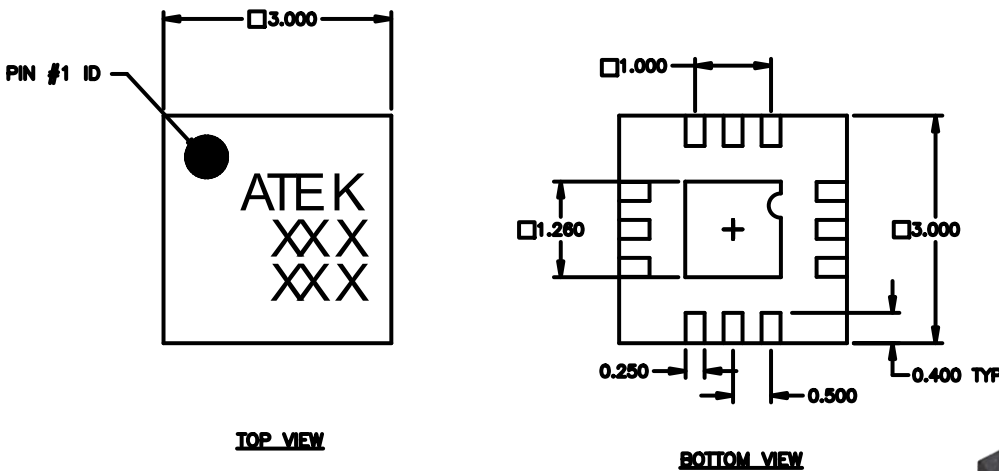


NOTES:  
1) ALL DIMENSIONS IN MM

SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A, V	0.80	1.00	E2	0.50	0.70
b	0.18	0.30	e	0.50	BSC
D	2.00	BSC	k	0.20	-
D2	1.10	1.30	L	0.30	0.40
E	2.00	BSC			



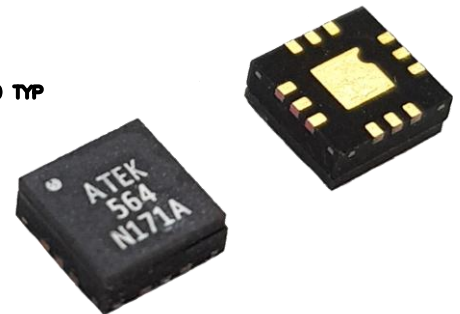
### AN3 3x3mm 12 Lead QFN Package



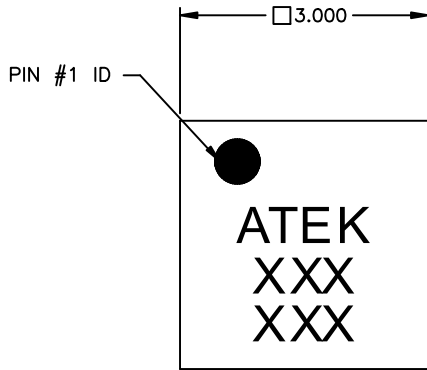
SECTION A-A

#### NOTES

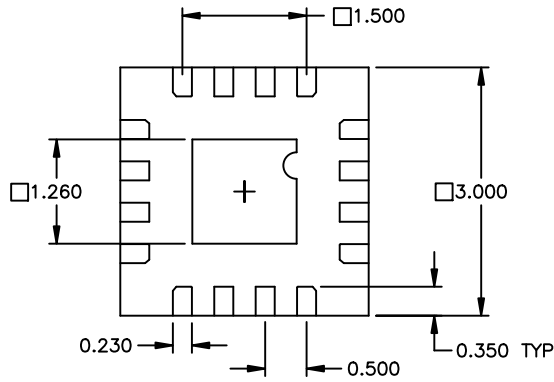
1. ALL DIMENSIONS IN MM



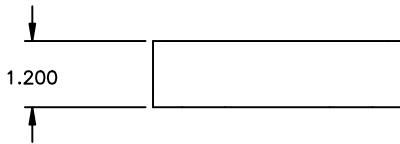
**N3 3x3mm 16 Lead QFN Package**



TOP VIEW



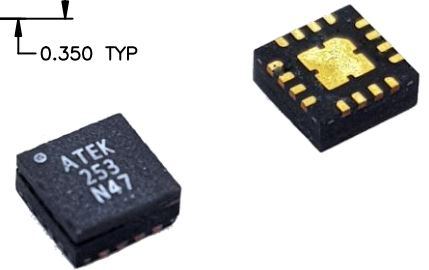
BOTTOM VIEW



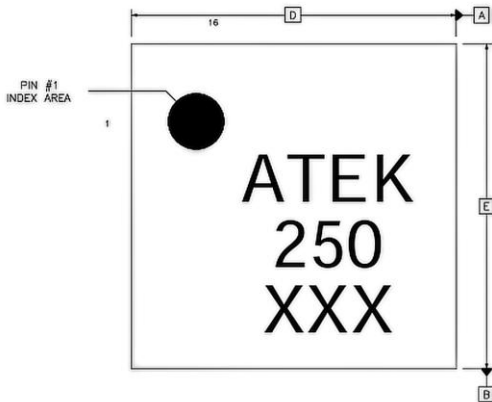
SIDE VIEW

NOTES

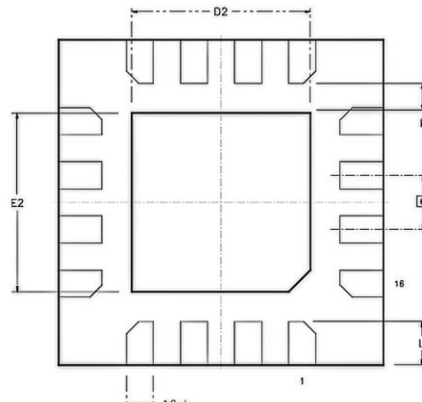
1. ALL DIMENSIONS IN MM



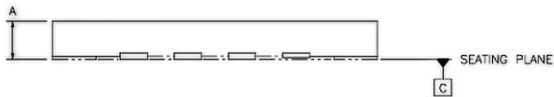
**P3 3x3mm 16 Lead QFN Package**



Top View



Bottom View



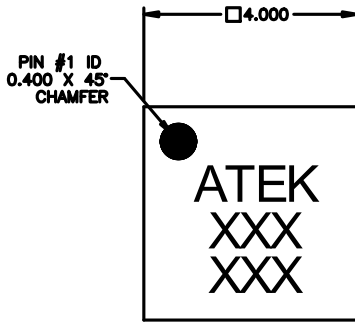
Side View

NOTES:  
1) ALL DIMENSIONS IN MM

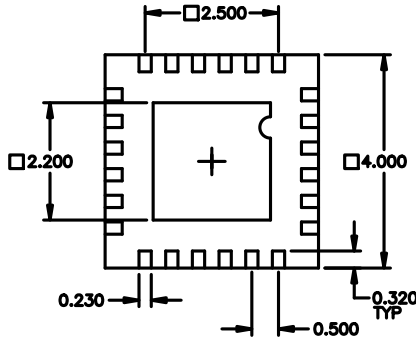
SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A, V	0.80	1.00	E2	1.55	1.75
b	0.18	0.30	e	0.50	BSC
D	3.00	BSC	k	0.20	-
D2	1.55	1.75	L	0.35	0.45
E	3.00	BSC			



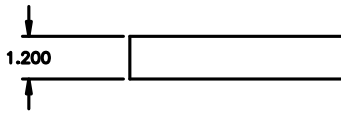
**N4 4x4mm 24 Lead QFN Package**



TOP VIEW



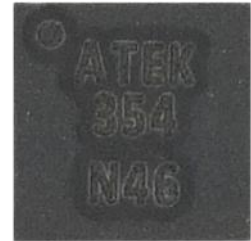
BOTTOM VIEW



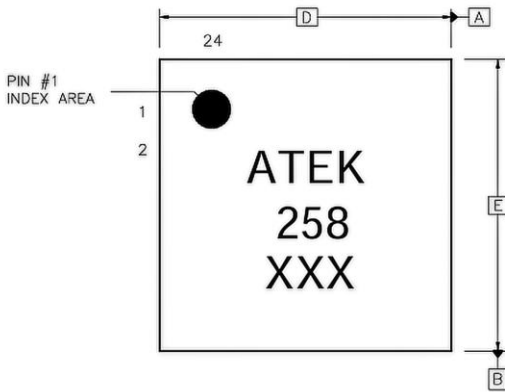
SECTION A-A

**NOTES**

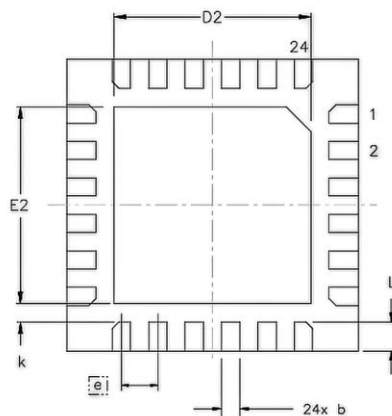
1. ALL DIMENSIONS IN MM



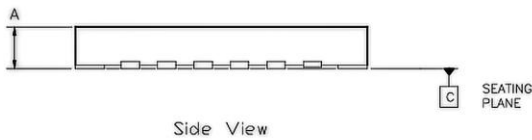
**P4 4x4mm 24 Lead QFN Package**



Top View



Bottom View



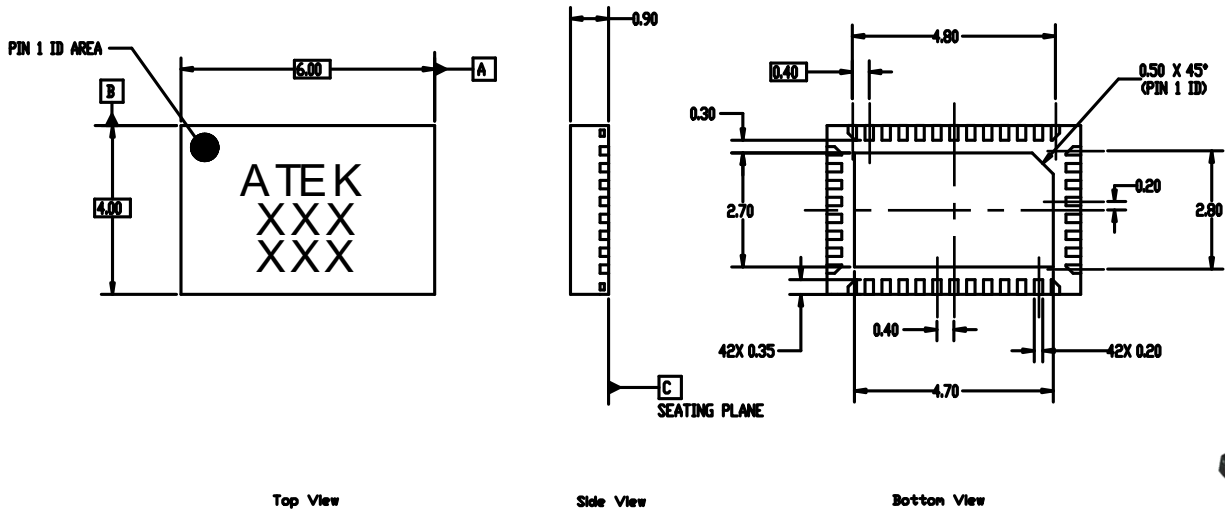
Side View

- NOTES:  
1) ALL DIMENSIONS IN MM

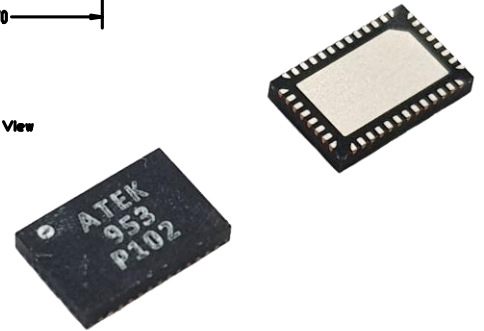
SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A, V	0.80	1.00	E2	2.60	2.80
b	0.18	0.30	e	0.50	BSC
D	4.00	BSC	k	0.20	-
D2	2.60	2.80	L	0.35	0.45
E	4.00	BSC			



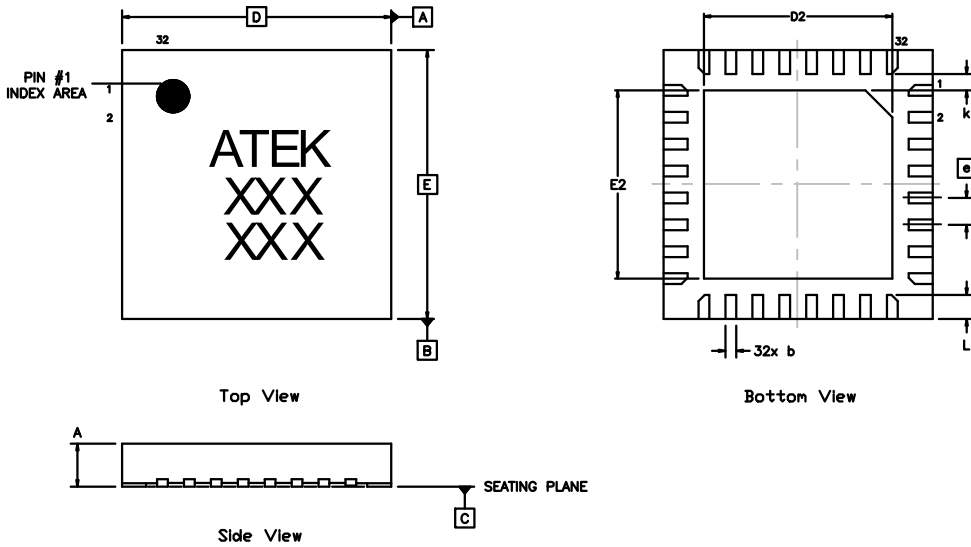
**P46 4x6mm 42 Lead QFN Package**



NOTES:  
1 - ALL DIMENSIONS IN MILLIMETERS.



**N5 5x5mm 32 Lead QFN Package**

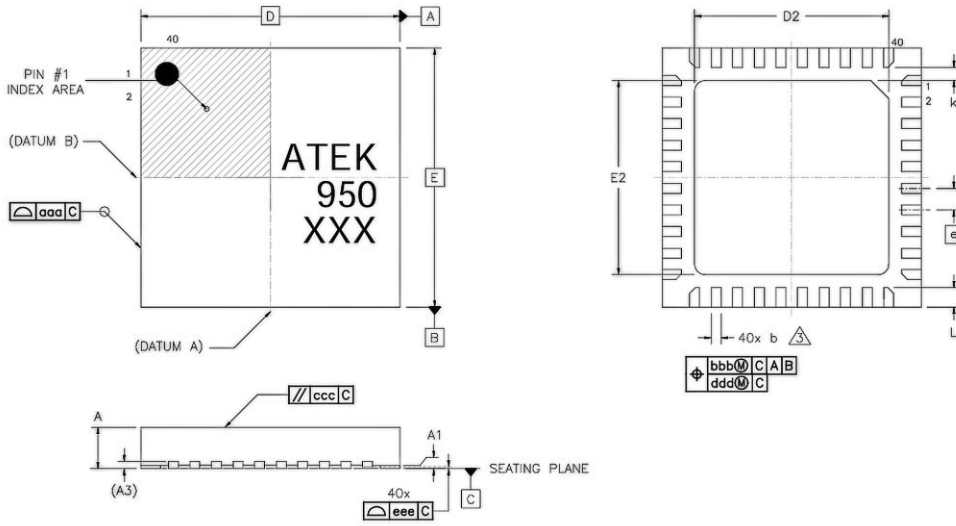


NOTES:  
1) ALL DIMENSIONS IN MM

SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A, V	0.80	1.00	E2	3.40	3.60
b	0.18	0.30	e	0.50 BSC	
D	5.00 BSC		k	0.20	-
D2	3.40	3.60	L	0.40	0.50
E	5.00 BSC				

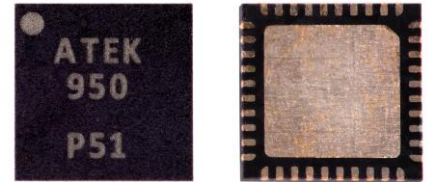


### P6 6x6mm 40 Lead QFN Package

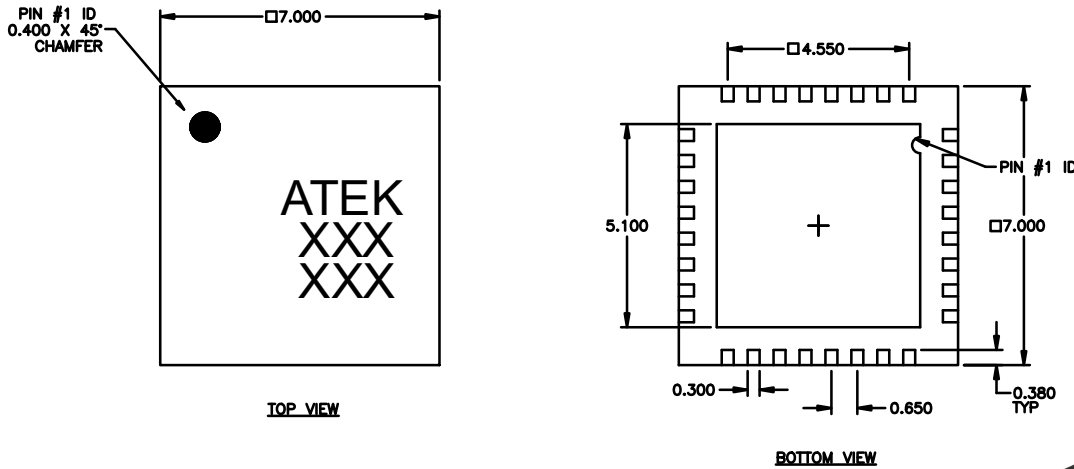


NOTES:  
 1) ALL DIMENSIONS IN MM  
 2) DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009  
 3) DIMENSION b APPLIES TO METALLIZED TERMINAL AND IS MEASURED BETWEEN 0.15 AND 0.30 MM FROM TERMINAL TIP

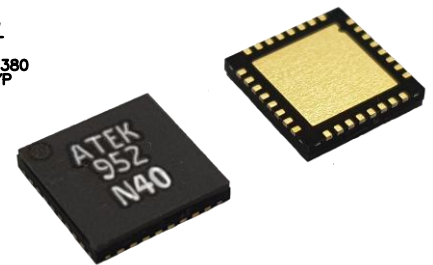
SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A, V	0.80	1.00	E2	4.40	4.60
A, W	0.70	0.80	e	0.50	BSC
A, L	1.40	1.70	k	0.20	-
A1	0.00	0.05	L	0.40	0.50
A3	0.20	REF	aaa	0.10	
b	0.18	0.30	bbb	0.10	
B	6.00	BSC	ccc	0.10	
D2	4.40	4.60	ddd	0.05	
E	6.00	BSC	eee	0.08	



### N7 7x7mm 32 Lead QFN Package



NOTES  
 1. ALL DIMENSIONS IN MM



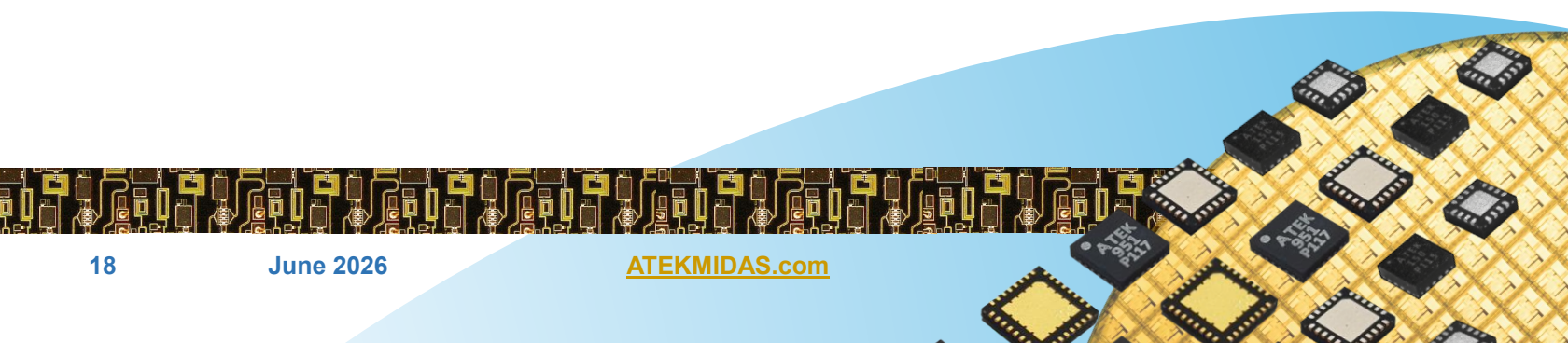
## Our Quality Policy

ATEK MIDAS embraces Quality and Continuous Improvement in everything we do. We maintain a Quality Management System (QMS), modeled after ISO9001:2015, that is implemented across our operations for the Development, Design and Manufacture of Semiconductor Components;

- ✓ Committing to all aspects of our quality policy and QMS, to support our projects with our strong design capability, to fulfill our customers' requests, needs, expectations, and contractual obligations within the specified time,
- ✓ Ensuring that the applicable requirements of our Quality Management System are followed,
- ✓ Ensuring that our Quality Management System works in accordance with and integrated with our business processes,
- ✓ Ensuring customer satisfaction and preserve it at a peak level,
- ✓ Supporting the professional development of our employees with guidance and appropriate training activities/programs,
- ✓ Ensuring our processes are calibrated to achieving targets, analyzing, continuously improving, measuring, and being accountable.

## Our Commitment

***ATEK MIDAS is ISO9001:2015 certified by TÜV. Every product is backed by every ATEK MIDAS employee, supplier, and sales partner's commitment to total quality, thus providing our customers with products that meet or exceed all requirements, are delivered on-time, and function reliably throughout their useful life.***



## How to Buy

ATEK MIDAS uses seasoned technical manufacturing representatives worldwide to promote our products and services to a wide customer base. **Our North American partner ViNo Waves LLC, is now ATEK America** providing sales, marketing, technical & operations support to ATEK MIDAS customers and representatives in the Americas.

To receive a pricing & delivery quote, request a sample, or place an order contact your local representative, ATEK America (Americas), or ATEK MIDAS (EMEA & APAC). We accept VISA & MASTERCARD or can offer NET30 day payment terms after an approved credit check. US\$250.00 minimum purchase order.

### ATEK MIDAS Design & Manufacturing Facilities

#### ISTANBUL HQ

Çifte Havuzlar Mah. Eski  
Londra Asfaltı Cad.  
YTÜ Teknopark B2 Blok  
151/1G No:105  
34220 Esenler/ Istanbul  
TÜRKİYE

+90 212 483 71 67

#### ANKARA Design Center

Bilkent Cyberpark  
Cyberplaza A Blok, 1. Kat  
No: 109A  
Ankara  
TÜRKİYE

[sales@atekmidas.com](mailto:sales@atekmidas.com)

### ATEK America Sales & Application Support

#### ATEK America, LLC

781-789-8454  
603-213-1250  
Dover, NH 03820 USA

[sales@atekamerica.com](mailto:sales@atekamerica.com)

**AMERICAs Customers: Please contact ATEK America if no representative is assigned to your location.**

## Americas Representatives

#### No. CALIFORNIA & No. NEVADA

##### NWN Inc.

408-437-2700  
[sales@nwn-inc.com](mailto:sales@nwn-inc.com)  
[www.nwn-inc.com](http://www.nwn-inc.com)

#### SOUTHEAST

FL, GA, SC, NC, TN, MS, AL

##### EOX SALES

321-345-6333  
[sales@eoxsales.com](mailto:sales@eoxsales.com)  
[www.eoxsales.com](http://www.eoxsales.com)

#### WEST SOUTH CENTRAL

TX, OK, AR, LA

##### EOX SALES

321-345-6333  
[sales2@eoxsales.com](mailto:sales2@eoxsales.com)  
[www.eoxsales.com](http://www.eoxsales.com)

#### MID-ATLANTIC

MD, DC, DE, VA, WV, PA, So.NJ

##### EOX SALES

321-345-6333  
[sales@eoxsales.com](mailto:sales@eoxsales.com)  
[www.eoxsales.com](http://www.eoxsales.com)

#### NEW ENGLAND

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##### R. CONNORS SALES

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[www.rcssales.com](http://www.rcssales.com)

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[www.ntsny.com](http://www.ntsny.com)

#### CANADA, EASTERN

QC, NL, NS, NB, PEI

##### AstecSDI - Montreal

514-833-2280  
[info@astecsdi.ca](mailto:info@astecsdi.ca)  
[www.astecsdi.ca](http://www.astecsdi.ca)

#### CANADA, CENTRAL

ON, MB, SK

##### AstecSDI - Toronto

905-607-1444  
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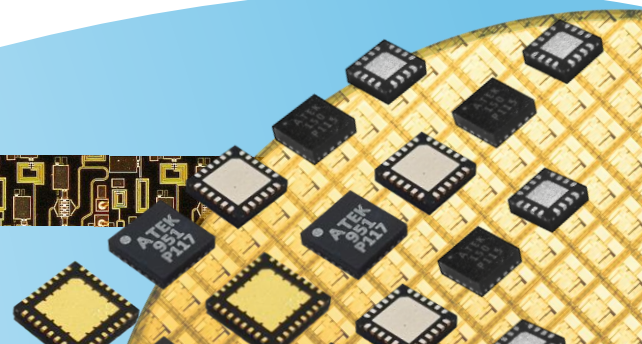
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