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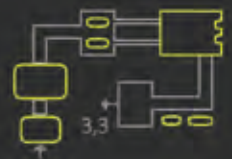
CHIP MAKER



FULL TEST SOLUTIONS



INSTRUMENTATION



CUSTOM ASIC DESIGN

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Programmable Multiplexers with Integrated CMU

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT1011-KMA	Digital 16:1 Multiplexer	DC	17Gbps	660	100-pin CQFP
ASNT1011-PQA	Digital 16:1 Multiplexer	DC	16Gbps	660	100-pin QFN
ASNT1011A-KMA	Digital 16:1 Multiplexer	DC	17Gbps	660	100-pin CQFP
ASNT1011A-PQA	Digital 16:1 Multiplexer	DC	17Gbps	660	100-pin QFN
ASNT1016-PQA	Digital 16:1 Multiplexer with 9.8-12.5GHz Integrated CMU	9.8GHz DC	12.5GHz 17Gbps	660	100-pin QFN
ASNT1017-PQA	Digital 16:1 Multiplexer with 12.0-14.3GHz Integrated CMU	12GHz DC	14.3GHz 17Gbps	660	100-pin QFN

Digital Multiplexers

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT1121-KMM	Broadband Digital 4:1 Multiplexer	DC	50Gbps	960	44-pin CQFP
ASNT1123-KMM	Broadband Digital DDR 4:1 Multiplexer	DC	64Gbps	1150	44-pin CQFP
ASNT1123-PQB	Broadband Digital DDR 4:1 Multiplexer	DC	32Gbps	1150	40-pin QFN
ASNT1124-KMM	Broadband Digital DDR 4:1 Multiplexer with Duty Cycle & Amplitude Control	DC	64Gbps	1180	44-pin CQFP
ASNT1140-KMA	Programmable DDR 16:1 Multiplexer/Serializer with Reset, Amplitude Control, and Clock Duty Cycle Control	DC	50Gbps	1520	100-pin CQFP
ASNT5050-KMC	Broadband Digital 2:1 Multiplexer / Selector	DC	32Gbps	450	24-pin CQFP
ASNT5050-PQC	Broadband Digital 2:1 Multiplexer / Selector	DC	32Gbps	450	24-pin QFN
ASNT5150-KMC	Broadband Digital 2:1 Multiplexer / Selector	DC	50Gbps	315	24-pin CQFP
ASNT5151-KMC	Broadband Digital 2:1 Multiplexer / Selector	DC	64Gbps	415	24-pin CQFP
ASNT5151-MOD	Modular Broadband Digital 2:1 Multiplexer/Selector	DC	64Gbps	565	Module
ASNT5153-KMC	Broadband Digital 2:1 Multiplexer / Selector w/ Duty Cycle & Amplitude Control	DC	56Gbps	500	24-pin CQFP
ASNT5153-MOD	Modular Broadband Digital 2:1 Multiplexer / Selector w/ Duty Cycle & Amplitude Control	DC	64Gbps	500	Module

Selectors and Switches

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT1122-KMC	Broadband 1 of 4 Selector / Switch	DC	32Gbps	300	24-pin CQFP
ASNT5051-KMC	High Isolation Selector / Switch 1 of 2	DC DC	32Gbps 17GHz	287	24-pin CQFP
ASNT5051-PQC	High Isolation Selector / Switch 1 of 2	DC DC	17Gbps 17GHz	287	24-pin QFN
ASNT5152-PQC	Broadband 1 of 2 High Isolation Selector / Switch	DC DC	17Gbps 17GHz	315	24-pin QFN



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Programmable Demultiplexers with Integrated CDR

P/N	FUNCTION	FREQUENCY		POWER	PACKAGE
		(min)	(max)	(mW)	
ASNT2011-KMA	Digital 1:16 Demultiplexer	DC	17Gbps	730	100-pin CQFP
ASNT2011-PQA	Digital 1:16 Demultiplexer	DC	17Gbps	730	100-pin QFN
ASNT2016-PQA	Digital 1:16 Demultiplexer with Integrated Full Rate CDR	11.3 DC	12.5Gbps 17Gbps	730	100-pin QFN
ASNT2017-PQA	Digital 1:16 Demultiplexer with Integrated Full Rate CDR	12.5 DC	13.6Gbps 17Gbps	890	100-pin QFN
ASNT2017A-PQA	Digital 1:16 Demultiplexer with Integrated Full Rate CDR	13.5 DC	14.4Gbps 17Gbps	890	100-pin QFN
ASNT2110-KMF	Reconfigurable 1:2 Demultiplexer with Integrated Half Rate PAM4 CR	25.5	32.5GHz	1600	64-pin CQFP
ASNT2112-KMF	Reconfigurable 1:2 Demultiplexer with Integrated Half Rate PAM4 CR	21	26GHz	1600	64-pin CQFP
ASNT2116-KMF	Reconfigurable 1:1 Full Rate PAM4 CR	25	31.5GHz	2250	64-pin CQFP
ASNT8160-KMF	Reconfigurable Half Rate CR	25.5	32.5GHz	1600	64-pin CQFP

Digital Demultiplexers

P/N	FUNCTION	FREQUENCY		POWER	PACKAGE
		(min)	(max)	(mW)	
ASNT2031-MBL	24:48 SSTL-SSTL Demultiplexer	1.0Mbps	2.0Gbps	2100	256-pin BGA
ASNT2032-MBL	12:24 LVDS-LVDS Demultiplexer	1.0Mbps	3.6Gbps	924	256-pin BGA
ASNT2121-KMM	Broadband Digital 1:4 Demultiplexer	DC	50Gbps	1350	44-pin CQFP
ASNT2123-KMM	Broadband Digital DDR 1:4 Demultiplexer	DC	64Gbps	1160	44-pin CQFP
ASNT2124-KMM	Broadband Digital DDR 1:4 Demultiplexer w/ Duty Cycle Control	DC	64Gbps	1250	44-pin CQFP
ASNT2140-KMA	Programmable DDR Demultiplexer 1:16 / Deserializer with Reset and Clock Duty Cycle Control	DC	32Gbps	1350	100-pin CQFP
ASNT5090-KMC	Broadband Digital 1:2 Demultiplexer	DC	48Gbps	730	24-pin CQFP
ASNT5090-PQC	Broadband Digital 1:2 Demultiplexer	DC	32Gbps	730	24-pin QFN
ASNT5190-KMC	Broadband Digital 1:2 Demultiplexer	DC	60Gbps	560	24-pin CQFP
ASNT5190A-KMC	Broadband Digital 1:2 Demultiplexer	DC	64Gbps	600	24-pin CQFP
ASNT5190B-KMC	Broadband Digital 1:2 Demultiplexer w/ Duty Cycle Control	DC	64Gbps	600	24-pin CQFP
ASNT5190B-MOD	Modular Broadband Digital 1:2 Demultiplexer w/ Duty Cycle Control	DC	64Gbps	600	Module



Broadband Digital Signal Delay Lines

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT5001-KMC	Clock / Data Phase Shifter with Linear OB and 265ps Delay Variation	DC	32Gbps	1000	24-pin CQFP
		DC	17GHz		
ASNT5001-PQC	Clock / Data Phase Shifter with Linear OB and 265ps Delay Variation	DC	32Gbps	1000	24-pin QFN
		DC	17GHz		
ASNT5070-PQC	Clock / Data Phase Shifter with 275ps Delay Variation	DC	17Gbps	1585	24-pin QFN
		DC	14GHz		
ASNT5071-PQC	Clock / Data Phase Shifter with 320ps Delay Variation	DC	17Gbps	1435	24-pin QFN
		DC	10GHz		
ASNT5073-KMC	Clock / Data Phase Shifter with Amplitude Control and 155ps Delay Variation	DC	28Gbps	1305	24-pin CQFP
		DC	14GHz		
ASNT5073-PQC	Clock / Data Phase Shifter with Amplitude Control and 155ps Delay Variation	DC	17Gbps	1305	24-pin QFN
		DC	17GHz		
ASNT5075-PQC	Clock / Data Phase Shifter with Phase Modulation and 260ps Delay Variation	DC	28Gbps	1585	24-pin QFN
		DC	14GHz		
ASNT5076-KMC	Clock / Data Phase Shifter with Amplitude Control and 155ps Delay Variation	DC	28Gbps	1355	24-pin CQFP
		DC	16GHz		
ASNT5076-PQC	Clock / Data Phase Shifter with Amplitude Control and 155ps Delay Variation	DC	17Gbps	1355	24-pin QFN
		DC	16GHz		
ASNT5079-KMC	Clock / Data Phase Shifter with Linear OB and 280ps Delay Variation	DC	20Gbps	1600	24-pin CQFP
		DC	14GHz		
ASNT5079-PQC	Clock / Data Phase Shifter with Linear OB and 280ps Delay Variation	DC	17Gbps	1600	24-pin QFN
		DC	14GHz		
ASNT5101-KMC	Clock / Data Phase Shifter with 105ps Delay Variation	DC	46Gbps	745	24-pin CQFP
		DC	23GHz		
ASNT5101-PQC	Clock / Data Phase Shifter with 105ps Delay Variation	DC	22Gbps	745	24-pin QFN
		DC	20GHz		
ASNT5102-KMC	Clock Phase Shifter with 105ps Delay Variation	DC	32.5GHz	875	24-pin CQFP
ASNT5105A-KMC	Clock / Data Phase Shifter with External Frequency Response Control and 110ps Delay Variation	DC	50Gbps	1250	24-pin CQFP
		DC	32GHz		
ASNT5106-KMC	Clock / Data Phase Shifter with External Frequency Response Control and 290ps Delay Variation	DC	32Gbps	1080-1450	24-pin CQFP
		DC	26GHz		
ASNT5106-PQC	Clock / Data Phase Shifter with External Frequency Response Control and 290ps Delay Variation	DC	28Gbps	1080-1450	24-pin QFN
		DC	18GHz		
ASNT5170-PQC	Clock / Data Phase Shifter with Low Power Consumption and 260ps Delay Variation	DC	17Gbps	610	24-pin QFN
		DC	14GHz		
ASNT5173-PQC	Clock / Data Phase Shifter with Variable Output Amplitude, Low Power Consumption, and 135ps Delay Variation	DC	17Gbps	495	24-pin QFN
		DC	13GHz		
ASNT5174-KMC	Clock / Data Phase Shifter with Low Power Consumption and 135ps Delay Variation	DC	28Gbps	415	24-pin CQFP
		DC	15GHz		
ASNT5175-PQC	Clock / Data Phase Shifter with Phase Modulation, Low Power Consumption, and 255ps Delay Variation	DC	17Gbps	610	24-pin QFN
		DC	14GHz		



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Narrowband Digital Delay Lines

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT5072-PQC	Clock Phase Shifter with 140ps Delay Variation	11	17GHz	910	24-pin QFN
ASNT5073A-PQC	Clock Phase Shifter with Amplitude Control and 150ps Delay Variation	11	17GHz	1305	24-pin QFN
ASNT5172-PQC	Clock Phase Shifter with Low Power Consumption and 100ps Delay Variation	11	17GHz	430	24-pin QFN

Linear Signal Splitters

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT6112-KMM	1-to-4 Analog Signal Splitter with Differential Outputs	DC	25GHz	1350	44-pin CQFP
ASNT6113-KMC	1-to-3 Analog Signal Splitter with Differential Outputs	DC	25GHz	1000	24-pin CQFP
ASNT6114-KMC	1-to-2 Analog Signal Splitter with Differential Outputs / PAM4	DC	25GHz	660	24-pin CQFP
NEW!! ASNT6194-KMC	1-to-2 Analog Differential Signal Splitter with Adjustable Bandwidth and Current	DC	32GHz	660	24-pin CQFP

Linear Selectors and Switches

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT6160A-KMC	Analog Signal Selector 1-of-2	DC	17GHz	810	24-pin CQFP
NEW!! ASNT6163-KMC	Analog Signal Selector 1-of-2 / Analog Combiner	DC	32GHz	700	24-pin CQFP
ASNT6161-KMM	Analog Signal Selector 1-of-4	DC	17GHz	2100	44-pin CQFP
ASNT6161-BD	Analog Signal Selector 1-of-4	DC	17GHz	2100	Not Packaged
ASNT6162-KMM	Linear Non-Blocking Cross-Switch 2x2	DC	17GHz	1260	44-pin CQFP
NEW!! ASNT6164-KMM	Linear Non-Blocking Cross-Switch 2x2 / Dual Analog Combiner	DC	32GHz	1400	44-pin CQFP



Linear Amplifiers

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT6141-KMC	Linear Amplifier	DC	12GHz	530	24-pin CQFP
ASNT6141-BD	Linear Amplifier Die	DC	12GHz	530	Not Packaged
ASNT6142-KMC	Linear Amplifier	DC	20GHz	695	24-pin CQFP
ASNT6142-BD	Linear Amplifier Die	DC	20GHz	695	Not Packaged

Delays and FIR Filters

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT6170-KMC	Analog Signal Adjustable Delay	DC	20GHz	560	24-pin CQFP
ASNT6171-KMO	Two-Channel 15-Tap Analog FIR Filter / 2x2 Switch	DC	10GHz	2650	64-pin CQFP
NEW! ASNT6172-KMN	Two-Channel 9-Tap Analog FIR Filter / 2x2 Switch	DC	18GHz	1600	64-pin CQFP

Transimpedance Amplifiers (TIAs)

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT6021-BD	Transimpedance Amplifier with Automatic Offset Control and Input Peak Detector Die	DC	17.6Gbps	250	Not Packaged
ASNT6121-BD	High Gain Transimpedance Amplifier with Limiting Amplifier, Automatic Offset Control, and Input Peak Detector Die	DC	43Gbps	475	Not Packaged
ASNT6122-BD	Low Power, Low Gain Transimpedance Amplifier with Automatic Offset Control and Input Peak Detector Die	DC	43Gbps	320	Not Packaged
ASNT6123-BD	Dual Transimpedance Amplifier with Automatic Offset Control and Input Peak Detectors Die	DC	25Gbps	495	Not Packaged
ASNT6124-BD	Transimpedance Amplifier with Linear Amplifier and Automatic Gain Control Die	DC	28Gbps	776	Not Packaged

Drivers

P/N	FUNCTION	FREQUENCY		POWER (mW)	PACKAGE
		(min)	(max)		
ASNT6119-KMF	Advanced Driver / Amplifier with Digital Pre-Emphasis, PAM4 Encoding, less than 200fs p-p jitter, with Standard CMOS 3-wire SPI interface	1	32.5Gbps	10000	Benchtop
ASNT6119A-KMF	Advanced Driver / Amplifier with Digital Pre-Emphasis, PAM4 Encoding, less than 200fs p-p jitter, with High-Speed CML 3-wire SPI interface	1	32.5Gbps	4000	64-pin CQFP
ASNT6119B-KMF	Advanced Driver / Amplifier with Digital Pre-Emphasis, PAM4 Encoding, less than 200fs p-p jitter, with Standard CMOS 3-wire SPI interface	1	33.5Gbps	4000	64-pin CQFP



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Signal Spectrum Converters

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT6150-KMM	Balanced I/Q Modulator (Up-Converter) with LPF	DC	18GHz	446	44-pin CQFP
ASNT6151-KMM	Balanced I/Q Modulator (Up-Converter)	DC	18GHz	430	44-pin CQFP
ASNT6152-KMM	Dual Continuous Time Linear Equalizer with Error Detection	0.05	28 Gbps	1000 / 1400	44-pin CQFP

Limiting Amplifiers

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT5037-KMC	Limiting Amplifier with Variable Control Amplitude (3.3V Power Supply)	DC	28Gbps	600	24-pin CQFP
ASNT5037-PQC	Limiting Amplifier with Variable Control Amplitude (3.3V Power Supply)	DC	17Gbps	647	24-pin QFN
ASNT5131-KMC	Limiting Amplifier with Variable Control Amplitude (5.0V Power Supply)	DC	28Gbps	500	24-pin CQFP
ASNT5131-PQC	Limiting Amplifier with Variable Control Amplitude (5.0V Power Supply)	DC	17Gbps	500	24-pin QFN
ASNT5132-KMC	Limiting Amplifier with Variable Output Amplitude	DC	32Gbps	750	24-pin CQFP
ASNT5136-BD	Limiting Amplifier	DC	45Gbps	365	Not Packaged
ASNT5136-KMC	Limiting Amplifier	DC	45Gbps	365	24-pin CQFP
ASNT5530-KMC	Limiting Amplifier	DC	45Gbps	340	24-pin CQFP

Digital Signal Splitters

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT5020-BD	Data/Clock Signal Distributor 1-to-2 Die	DC	28Gbps	560	Not Packaged
ASNT5020-PQC	Data/Clock Signal Distributor 1-to-2	DC	28Gbps	560	24-pin QFN
ASNT5020-PQD	Data/Clock Signal Distributor 1-to-2	DC	26Gbps	560	16-pin QFN
ASNT5021-PQC	Data/Clock Signal Distributor 1-to-3	DC	28Gbps	780	24-pin QFN
ASNT5021-PQD	Data/Clock Signal Distributor 1-to-3	DC	26Gbps	780	16-pin QFN
ASNT5022-BD	Data/Clock Signal Distributor 1-to-3 Die	DC	28Gbps	810	Not Packaged
ASNT5023-KMM	Data/Clock Signal Distributor 1-to-4	DC	28Gbps	1220	44-pin CQFP
ASNT5023-PQC	Data/Clock Signal Distributor 1-to-4	DC	28Gbps	1220	24-pin QFN
ASNT5024-KMC	Data/Clock Signal Distributor 1-to-3 with Differential Outputs in Order	DC	28Gbps	780	24-pin CQFP
ASNT5024-PQC	Data/Clock Signal Distributor 1-to-3 with Differential Outputs in Order	DC	28Gbps	780	24-pin QFN



Digital Signal Splitters

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT5121-KMC	Data/Clock Signal Distributor 1-to-3	DC	50Gbps 32GHz	580	24-pin CQFP
ASNT5121B-KMC	Clock Signal Distributor 1-to-3 with jitter less than 140fs	DC	35GHz	760	24-pin CQFP
ASNT5121C-KMC	Data/Clock Signal Distributor 1-to-3	DC DC	50Gbps 32GHz	580	24-pin CQFP
ASNT5121D-KMC	Clock Signal Distributor 1-to-3	DC	35GHz	760	24-pin CQFP
ASNT5121E-KMC	Data Signal Distributor 1-to-3	DC	64Gbps	710	24-pin CQFP

D-Type Flip-Flops

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT5010-KMC	D-Type Flip-Flop with 12.5GHz Analog Bandwidth	DC	32Gbps	415	24-pin CQFP
ASNT5010-PQC	D-Type Flip-Flop	DC	17Gbps	415	24-pin QFN
ASNT5012-KMC	D-Type Flip-Flop with Increased Input Signal Sensitivity and 13GHz Analog Bandwidth	DC	32Gbps	465	24-pin CQFP
ASNT5012-PQC	D-Type Flip Flop with Increased Input Signal Sensitivity	DC	17Gbps	465	24-pin QFN
ASNT5013-KMC	D-Type Flip-Flop with Single-Ended Output Amplitude Control up to 700mV	DC	30Gbps	510	24-pin CQFP
ASNT5014-KMC	D-Type Flip-Flop with Single-Ended Output Amplitude Control up to 1000mV	DC	25Gbps	725	24-pin CQFP
ASNT5110-KMC	D-Type Flip-Flop with Amplitude Control	DC	40Gbps	300	24-pin CQFP
ASNT5111-KMC	D-Type Flip-Flop with Amplitude Control	DC	50Gbps	720	24-pin CQFP
ASNT5112-KMC	Low Power D-Type Flip-Flop with Increased Input Signal Sensitivity and 15GHz Analog Bandwidth	DC	32Gbps	300	24-pin CQFP
ASNT5113-KMC	D-Type Flip-Flop with Increased Input Signal Sensitivity, Common Mode Level Adjustment, and 30GHz Input Bandwidth	DC	32Gbps	510	24-pin CQFP
ASNT5114-KMC	Linearized D-Type Flip Flop with Increased Input Signal Sensitivity and Common Mode Level Adjustment	DC	32Gbps	530	24-pin CQFP
ASNT5115-KMM	Dual D-Type Flip-Flop with Increased Input Signal Sensitivity and Common Mode Level Adjustment	DC	32Gbps	1020	44-pin CQFP
ASNT5116-KMM	Linearized Dual D-Type Flip Flop with Increased Input Signal Sensitivity and Common Mode Level Adjustment	DC	32Gbps	1010	44-pin CQFP
ASNT5117-KMC	D-Type Flip Flop with Increased Input Signal Sensitivity, Output Amplitude Control, and Common Mode Level Adjustment	DC	40Gbps	726	24-pin CQFP



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Boolean Logic Gates

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT5040-KMC	XOR Logic Gate	DC	25GHz	415	24-pin CQFP
ASNT5040-PQC	XOR Logic Gate	DC	17GHz	415	24-pin QFN
ASNT5140-KMC	XOR Logic Gate	DC	30GHz	270	24-pin CQFP
ASNT5160-KMC	AND/OR Logic Gate	DC	50Gbps	270	24-pin CQFP
NEW!! ASNT5142-ALP	XOR Logic Gate with Five Output Drivers with Individual Control of Amplitude, Peaking and Skew	DC	11GHz	1150	32-pin LGA
NEW!! ASNT5143-ALD	XOR Logic Gate w/ Adjustable Output Amplitude	DC	11GHz	250	16-pin ES-QFN

Programmable CMUs

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT8050-PQB	Programmable PLL w/ Integrated VCOs	7.4 10.8	8.8GHz 12.7GHz	630	40-pin QFN
ASNT8051-PQB	Programmable PLL w/ Integrated VCOs	9.9 11.0	12.1GHz 12.9GHz	570	40-pin QFN
ASNT8052-PQB	Programmable PLL w/ Integrated VCOs	11.0 13.0	13.3GHz 14.4GHz	585	40-pin QFN
ASNT8151-KMC	Programmable Low Phase Noise, less than 290fs jitter PLL with Integrated VCOs	24.0	32.1GHz	450-530	24-pin CQFP

Frequency Dividers

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT8110-PQB	Programmable Integer Divider	DC	24GHz	2030-3150	24-pin QFN
ASNT8110A-PQB	Programmable Integer Divider w/ SPI Interface	DC	24GHz	2030-3150	24-pin QFN
ASNT8130-KMC	Broadband Clock Divider-by-2 / by-4	DC	36GHz	260	24-pin CQFP
ASNT8131-PQC	Broadband Clock Divider by-2 / by-4	DC	32GHz	317	24-pin QFN
ASNT8131-KMC	Broadband Clock Divider by-2 / by-4	DC	32GHz	317	24-pin CQFP
ASNT8132-KMC	Broadband Clock Divider-by-2	DC	54GHz	630	24-pin CQFP
ASNT8133-KMC	Broadband Clock Divider by-1 / by-2 / by-4	DC	50GHz	845	24-pin CQFP

Multipliers

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT5141-KMC	Frequency Doubler	4	30GHz	545	24-pin CQFP



Phase Detectors

P/N	FUNCTION	FREQUENCY		POWER	PACKAGE
		(min)	(max)	(mW)	
ASNT8120-KMC	Linear Phase Detector	DC	28.6Gbps	760	24-pin CQFP
ASNT8121-KMC	Linear Phase Detector	DC	34Gbps	895	24-pin CQFP

PRBS Signal Generators

P/N	FUNCTION	FREQUENCY		POWER	PACKAGE
		(min)	(max)	(mW)	
ASNT8140-KMC	PRBS7 Generator w/ (x^7+x+1) Polynomial	DC	23Gbps	530	24-pin CQFP
ASNT8141-KMC	PRBS7 Generator w/ (x^7+x^6+1) Polynomial	DC	23Gbps	530	24-pin CQFP
ASNT8142-KMC	PRBS7/PRBS15 Generator (x^7+x^6+1) and $(x^{15}+x^{14}+1)$ Polynomials	DC	23Gbps	660	24-pin CQFP
NEW! ASNT8143-KMC	PRBS9/PRBS10 Generator (x^9+x^8+1) and $(x^{10}+x^9+1)$ Polynomials	DC	24Gbps	740	24-pin CQFP

Encoders

P/N	FUNCTION	FREQUENCY		POWER	PACKAGE
		(min)	(max)	(mW)	
ASNT6101-KMM	PAM4 Signal Generator / Encoder	2	65Gbps	1250	44-pin CQFP

Digital Filters

P/N	FUNCTION	FREQUENCY		POWER	PACKAGE
		(min)	(max)	(mW)	
ASNT8170-KMM	9-Tap Finite Impulse Response Filter	DC	5.6 GHz	422	44-pin CQFP
ASNT8172-KMF	2V Driver with Asynchronous 9-Tap Finite Impulse Response Filter	DC	10GHz	1240	64-pin CQFP

Interface & Level Converters

P/N	FUNCTION	FREQUENCY		POWER	PACKAGE
		(min)	(max)	(mW)	
ASNT3010-PQB	LVDS/CMOS/LVDS Converter & Signal Splitter	DC	2Gbps	115	40-pin QFN
ASNT3111-KMC	Single-Channel CML-to-PCML Level Shifter	DC	40Gbps	260	24-pin CQFP
ASNT3111-PQC	Single-Channel CML-to-PCML Level Shifter	DC	20Gbps	260	24-pin QFN
ASNT3112-KMC	Dual-Channel Linear Signal Level Down-Shifter	DC	32Gbps	1150	24-pin CQFP



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ADCs

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT7112-PQB	Differential Sample-and-Hold Amplifier with 14GHz Input Analog Bandwidth	DC	14GHz	1750	40-pin QFN
ASNT7113-KMC	6GS/s Differential Track-and-Hold Amplifier with 20GHz Input Analog Bandwidth	DC	20GHz	1750	24-pin CQFP
ASNT7120-KMA	6GS/s 4-bit Flash Analog-to-Digital Converter with 18GHz Input Analog Bandwidth	DC	18GHz	2400	100-pin CQFP
ASNT7120A-KMA	15GS/s 4-bit Flash Analog-to-Digital Converter with 20GHz Input Analog Bandwidth	DC	20GHz	3570	100-pin CQFP
ASNT7121-KMA	15GS/s 4-bit Flash Analog-to-Digital Converter w/ 20GHz Input Analog Bandwidth and PRBS Generator	DC	20GHz	2800-2850	100-pin CQFP
ASNT7122-KMA	15GS/s 4-bit Flash Analog-to-Digital Converter with 20GHz Input Analog Bandwidth, PRBS Generator, and High Speed Outputs	DC	20GHz	4340	100-pin CQFP
ASNT7123-KMA	16GS/s 4-bit Flash Analog-to-Digital Converter with 20GHz Input Analog Bandwidth, PRBS Generator, and High Speed Outputs	DC	20GHz	4620	100-pin CQFP

Board Level Products

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT28_1	Clock Divider by-4 / 1-to-512	2kHz	32GHz	3795	Board
ASNT2MUX25	Dual Channel Data Rate Doubler w/ Sync Output	DC	44Gbps	7260 or 9060 if divider installed	Board
ASNT501	Clock Divider by-8 / 2-to-1024	2kHz	41GHz	3630	Board
ASNT502	Clock Divider by-8 / 2-to-1024	2kHz	56GHz	4300	Board
ASNTPRBS20_1	2 ⁷ -1 PRBS Generator w/ Jitter Insertion, Sync Output, & Amplitude Control	20Mbps	18Gbps	5900	Board
ASNTPRBS20B_1	2 ⁷ -1 / 2 ¹⁵ -1 PRBS Generator w/ Jitter Insertion, Sync Output, & Amplitude Control	20Mbps	18Gbps	6900	Board
ASNTPRBS32_1	2 ⁷ -1 PRBS Generator with Sync Output	8Gbps	34Gbps	4600	Board
ASNTPRBS34_1	2 ⁷ -1 / 2 ¹⁵ -1 PRBS Generator with Sync Output	8Gbps	34Gbps	5100	Board
ASNTPRBS40_1	2 ⁷ -1 PRBS Generator with Sync Output	4Gbps	44Gbps	6800	Board
ASNTPRBS56_1	2 ⁷ -1 / 2 ¹⁵ -1 PRBS Generator with Sync Output	4Gbps	52Gbps	7000	Board
ASNT2113_EV	High-Speed Burst-Mode CDR Filter	6Gbps	30Gbps	5540	Board
NEW!! ASNT9001-JI	Advanced up to 2GHz Jitter Generation/Insertion Module w/ USB Control Interface	DC	29GHz	16000	Board
NEW!! ASNT_CMx4	Dual-Output Clock Multiplier-by-4 w/ SPI-Controlled Amplitude, Peaking and Skew	DC	22GHz	1650	Board

Instrumentation

P/N	FUNCTION	FREQUENCY (min)	FREQUENCY (max)	POWER (mW)	PACKAGE
ASNT6118-MOD	Modular Advanced Driver / Amplifier with Digital Pre-Emphasis, PAM4 Encoding, and less than 200fs p-p Jitter	1	32.5Gbps	10000	Benchtop
ASNT_ED45_2CH	2 Channel PRBS Error Detector with USB Control Interface	1	33.5Gbps	238,000	Benchtop
ASNT_FS8151	Frequency Synthesizer with USB Control Interface	4	32GHz	15000	Benchtop
ASNT_MUX64	2:1 Multiplexer w/ USB Control Interface	2Mbps	64Gbps	15000	Benchtop
ASNT_DMUS64	1:2 Demultiplexer w/ USB Control Interface	2Mbps	64Gbps	3500	Benchtop
ASNT_PRBS43A	2 ⁷ -1 / 2 ¹⁵ -1 PRBS Generator with USB Control Interface and on-board PLL	10kBps	48Gbps	20000	Benchtop
ASNT_PRBS45	PRBS7 to PRBS31 Pattern Generator with USB Control Interface	4	45Gbps	21250	Benchtop
ASNT_MPSG	Synchronous 4-Channel 40Gbps PRBS Generator with USB Control Interface	100Mbps	40Gbps	15000	Benchtop
ASNT9001-JI	Advanced Jitter Generation / Insertion Module with USB Control	DC	29GHz	16000	Benchtop
ASNT_6901-MOD	128Gbps PAM4 Data Generator with USB Control Interface	1Gbaud	64Gbaud	130,000	Benchtop
ASNT_6902-MOD	112Gbps PAM4 Data Generator with USB Control Interface	1Gbaud	56Gbaud	22500	Benchtop
ASNT_6900-MOD	128Gbps PAM4 Data Decombiner with USB Control Interface	1Gbaud	64Gbaud	TBD	Benchtop



ASNT_PRBS45

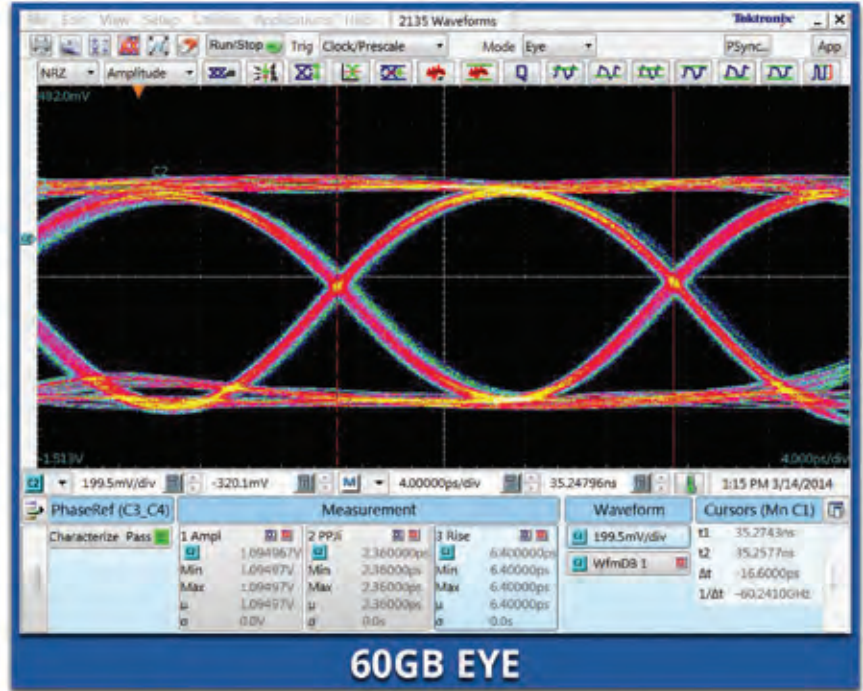
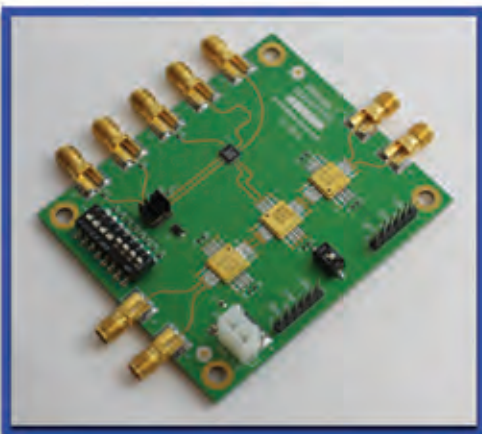
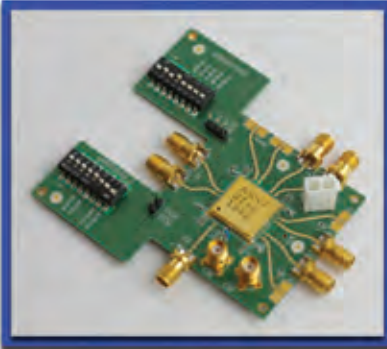
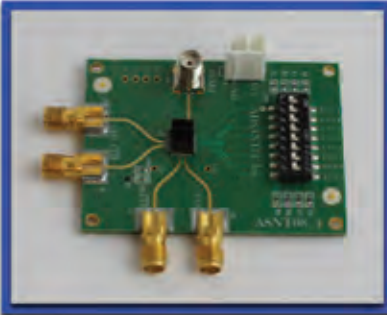
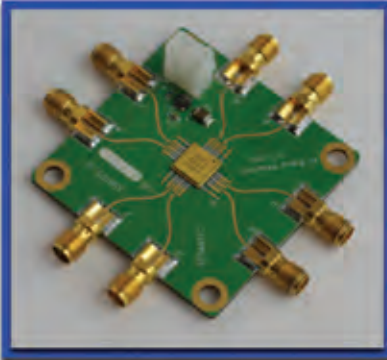


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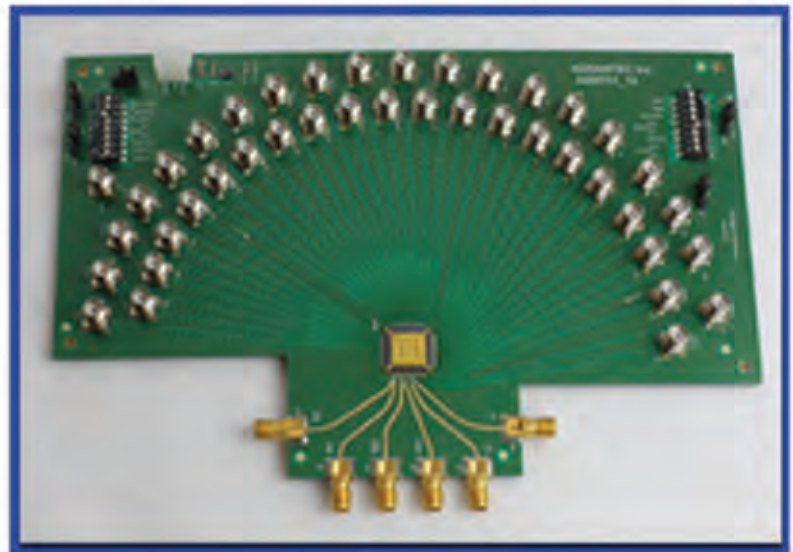


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Capability Overview



ADSANTEC OFFERS EVALUATION
BOARDS FOR MOST OF ITS IC



ADSANTEC



Company Overview



Established January 2002



Located in Torrance, CA, USA



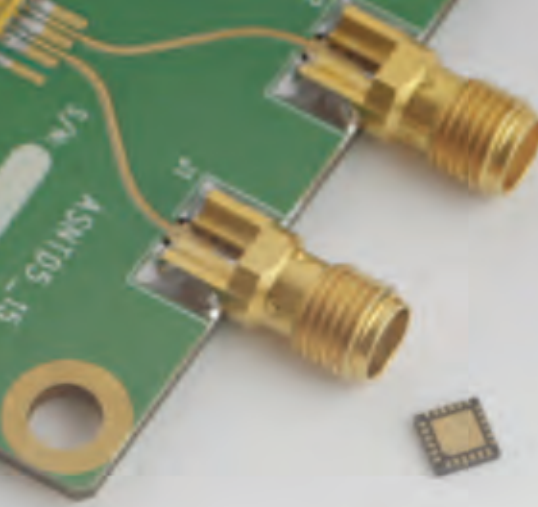
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