

CoreHW

CoreHW IP Catalog

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1 Introduction

This document lists and describes the available CoreHW Intellectual Property blocks (IP). This is a preliminary list of CoreHW IP. Available IP, IP names, IP descriptions and versions can change without further notice.

2 List of CoreHW IPs

Process	Type	Short Description	NAME	Mail
GF22	TOP	Receiver for Wi-Fi Front-end	CoreWiFiRXFEGF22	Inquiry
GF22	RX	Wifi Receiver,2402-2480 MHz	CoreRXWiFi2G41AGF22	Inquiry
GF22	LNA	Low-Noise Amplifier (Single-ended cascode)	CoreLNANF31AGF22	Inquiry
GF22	MIX	RF Passive Mixer+TIA	CoreMIX2G41AGF22	Inquiry
GF22	OTA	RF Transconductance Amplifier	CoreOTA2G41AGF22	Inquiry
GF22	MIX	RF Switching Quad	CoreMIXQUA2G41AGF22	Inquiry
GF22	AUX	25 % duty cycle generator	CoreAUX1AGF22	Inquiry
GF22	TIA	Transimpedance Amplifier, BW=50MHz	CoreTIA50M1AGF22	Inquiry
GF22	DET	Detector for RSSI	CoreDETPK1AGF22	Inquiry
GF22	CMP	Comparator for RSSI	CoreCMP1AGF22	Inquiry
GF22	MIX	PA High-Linearity Mixer	CoreMIXLIN2G41AGF22	Inquiry
GF22	BG	Voltage Reference, 1.2V	CoreBG1V21AGF22	Inquiry
GF22	CMP	General Purpose Comparator	CoreCMPD1AGF22	Inquiry
GF22	PLL	MMWave 80GHz PLL with VCO frequency range 19.00-20.25 GHz	CorePLL80G1AGF22	Inquiry
GF22	BG	600mV Sub-BG Voltage Reference	CoreBG0V61AGF22	Inquiry
GF22	VCO	VCO 20GHz	CoreVCO20G1AGF22	Inquiry
GF22	LDO	Low-noise Regulator for VCO 1V to 0.8V	CoreLDOLNOV81AGF22	Inquiry
GF22	LDO	Voltage Regulator 1V to 0.8V	CoreLDO0V81AGF22	Inquiry
GF22	MLTP	RF Multiply by 2, 20GHz to 40GHz	CoreMLTP2x20G1AGF22	Inquiry
GF22	MLTP	RF Multiply by 2, 40GHz to 80GHz	CoreMLTP2x40G1AGF22	Inquiry
GF22	DIV	Divide-By-Two, 80GHz to 40GHz	CoreDIV2x80G1AGF22	Inquiry
GF22	DIV	Divide-By-Two, 40GHz to 20GHz	CoreDIV2x40G1AGF22	Inquiry
GF22	DIV	Divide-By-Two, Sub 20GHz	CoreDIV2x20G1AGF22	Inquiry
GF22	BUF	5GHz RF Buffer	CoreBUF5G1AGF22	Inquiry
GF22	SLC	Reference Slicer, Differential to Single-Ended	CoreSLC122M1AGF22	Inquiry
GF22	DAC	Resistive DAC, 10b	CoreDAC10b1AGF22	Inquiry
GF22	CNT	RF Counter, 8b	CoreCNT10b1AGF22	Inquiry
GF22	DET	40GHz Amplitude Detector	CoreDET40G1AGF22	Inquiry
GF22	BUF	80GHz Amplitude detector	CoreBUF80G1AGF22	Inquiry
GF40	TOP	CorePLL: High-Performance Synthesizers, 6GHz	CorePLL6GGF40	Inquiry
GF40	PLL	High-Performance RFPLL with 3 VCOs from 7GHz to 12GHz	CorePLLRF3VCO1AGF40	Inquiry
GF40	PLL	High-Performance CLKPLL with 1 VCO from 10GHz to 12GHz	CorePLLCLK1VCO1AGF40	Inquiry
GF40	BG	Voltage Reference with Cext Option, 1.2V	CoreBGEXT1V21AGF40	Inquiry
GF40	LDO	Low-Noise Regulator, Tunable, 1.2V	CoreLDO39m1V21AGF40	Inquiry
GF40	VCO	VCO1, Fcenter 7GHz	CoreVCO7G1AGF40	Inquiry
GF40	VCO	VCO2, Fcenter 10GHz	CoreVCO10G1AGF40	Inquiry
GF40	VCO	VCO3, Fcenter 12GHz	CoreVCO12G1AGF40	Inquiry
GF40	DET	Amplitude Detector, Ouput 2bits	CoreDETPK12G1AGF40	Inquiry
GF40	MUX	RF Multiplexer, Differential, 3to1	CoreMUXRF3to11AGF40	Inquiry
GF40	BUF	RF Buffer, Fmax 12GHz, External drive	CoreBUFEXT12G1AGF40	Inquiry
GF40	BUF	RF Buffer, Fmax 12GHz, Internal Drive	CoreBUFINT12G1AGF40	Inquiry

Process	Type	Short Description	NAME	Mail
GF40	DIV	Divide-By-Two, up to 12GHz, Programmable Direct / Div-By-2 Modes, up to 12GHz	CoreDIV212G1AGF40	Inquiry
GF40	DIV	Divide-by-N, up to 3GHz, Programmanble Division Number	CoreDIVN3G1AGF40	Inquiry
GF40	D2S	RF Slicer, Differential to Single-Ended, up to 12GHz	CoreD2S12G1AGF40	Inquiry
GF40	SYNC	Synchronizer, up to 12GHz	CoreSYNC12G1AGF40	Inquiry
GF40	D2S	Reference Slicer, Differential to Single-Ended	CoreD2S500M1AGF40	Inquiry
GF40	PD	Phase Detector, Up to 250MHz	CorePD250M1AGF40	Inquiry
GF40	CP	Charge Pump, tunable	CoreCP1AGF40	Inquiry
GF40	LPF	Loop Filter, Tunable BandWidth, Embedded 10bit ADC/DAC, Lbw=200kHz	CoreLPF200k1AGF40	Inquiry
GF40	DAC	Resistive DAC, 10b	CoreDACRES10b1AGF40	Inquiry
GF40	ADC	SAR ADC with RDAC, 10b	CoreADC10bSAR1AGF40	Inquiry
GF40	TSENS	Temperature Sensor, voltage output	CoreTSENS1AGF40	Inquiry
GF40	OPA	Rail-To-Rail Operational Amplifier	CoreOPAR2R1AGF40	Inquiry
GF40	OPA	Operational Amplifier for output buffering	CoreOPABUF1AGF40	Inquiry
GF40	CNT	RF Counter, 8b	CoreCNT8b6G1AGF40	Inquiry
GF55	TOP	CorePLL: High-Performance CA Synthesizers for 4G(LTE) with Carrier Aggregation (CA Rel11, Rel12) & 2G(GSM)	CorePLLCAGF55	Inquiry
GF55	PLL	High-Performance RFPLL with Wide-Tuning VCO (Fmid=6GHz)	CorePLLR1VCO1AGF55	Inquiry
GF55	PLL	High-Performance RFPLL with Wide-Tuning VCO (Fmid=6GHz) + GSM VCO (Fmid=7.2GHz)	CorePLLR2VCO1AGF55	Inquiry
GF55	BG	Voltage Reference with Cext Option, 1.2V	CoreBGEXT1V21AGF55	Inquiry
GF55	LDO	Low-Noise Regulator, 5mA, 1.2V	CoreLDO51V21AGF55	Inquiry
GF55	LDO	Low-Noise Regulator, 40mA, 1.2V	CoreLDO401V21AGF55	Inquiry
GF55	LDO	Low-Noise Regulator, 15mA, 1.2V	CoreLDO151V21AGF55	Inquiry
GF55	VCO	VCO1, Wide-Tuning, Fcenter=6GHz	CoreVCO6G1AGF55	Inquiry
GF55	VCO	VCO2, High-Q, Fcenter=7.2GHz	CoreVCO7G1AGF55	Inquiry
GF55	DET	Amplitude Detector, Output 2bits	CoreDETPK1AGF55	Inquiry
GF55	BUF	RF Buffer, CMOS, Push-Pull, Fmax 8GHz, for Internal Drive	CoreBUFINT8G1AGF55	Inquiry
GF55	MUX	RF Multiplexer, Differential, 4to2	CoreMUXRF4to21AGF55	Inquiry
GF55	BUF	RF Buffer, CMOS, Push-Pull, Fmax 8GHz, for External Drive	CoreBUFEXT8G1AGF55	Inquiry
GF55	DIV	Divide-By-Two, CMOS, up to 8GHz	CoreDIV28G1AGF55	Inquiry
GF55	DIV	Divide-By-Three, CMOS, up to 8GHz	CoreDIV38G1AGF55	Inquiry
GF55	DIV	Divide-By-Two IQ, CMOS, up to 8GHz	CoreDIV2IQ8G1AGF55	Inquiry
GF55	DIV	Divide-By-Four IQ, CMOS, up to 8GHz	CoreDIV4IQ8G1AGF55	Inquiry
GF55	D2S	RF Slicer, Differential to Single-Ended, up to 8GHz	CoreD2S8G1AGF55	Inquiry
GF55	DIV	RF Pre-Divider, Control from Digital Logic, up to 8GHz	CoreDIVPR8G1AGF55	Inquiry
GF55	SYNC	Synchronizer, up to 6GHz	CoreSYNC6G1AGF55	Inquiry
GF55	D2S	Reference Slicer, Differential to Single-Ended	CoreD2S500M1AGF55	Inquiry
GF55	PD	Phase Detector, up to 52MHz	CorePD52M1AGF55	Inquiry
GF55	CP	Charge Pump, tunable	CoreCP1AGF55	Inquiry
GF55	LPF	Loop Filter, Tunable BW, Embedded 5bit ADC/DAC, Loop BW=200kHz	CoreLPF200k1AGF55	Inquiry
GF55	DAC	Resistive DAC, 5b	CoreDACRES5b1AGF55	Inquiry
GF55	ADC	SAR ADC with RDAC, 5b	CoreADC5bSAR1AGF55	Inquiry
GF55	CNT	RF Counter, 16b	CoreCNT16b6G1AGF55	Inquiry
STM65	TOP	CorePLL: High-Performance Synthesizers, 10GHz	CorePLL10GSTM65	Inquiry
STM65	PLL	High-Performance RFPLL with Wide-Tuning VCO (Fmid=6GHz)	CorePLLR1VCO1ASTM65	Inquiry

Process	Type	Short Description	NAME	Mail
STM65	PLL	High-Performance RFPLL with Wide-Tuning VCO (Fmid=6GHz) + GSM VCO (Fmid=7.2GHz)	CorePLLRF2VCO1ASTM65	Inquiry
STM65	BG	Voltage Reference with Cext Option, 1.2V	CoreBGEXT1V21ASTM65	Inquiry
STM65	LDO	Low-Noise Regulator, NMOS, By-Pass Mode, 5mA, 1.2V	CoreLDO51V21ASTM65	Inquiry
STM65	LDO	Low-Noise Regulator, NMOS, By-Pass Mode, 40mA, 1.2V	CoreLDO401V21ASTM65	Inquiry
STM65	LDO	Low-Noise Regulator, NMOS, By-Pass Mode, 15mA, 1.2V	CoreLDO151V21ASTM65	Inquiry
STM65	VCO	VCO1, Wide-Tuning, Fcenter=6GHz	CoreVCO6G1ASTM65	Inquiry
STM65	VCO	VCO2, High-Q, Fcenter=7.2GHz	CoreVCO7G1ASTM65	Inquiry
STM65	DET	Amplitude Detector, Ouput 2bits	CoreDETPK1ASTM65	Inquiry
STM65	BUF	RF Buffer, CMOS, Push-Pull, Fmax 8GHz, for Internal drive	CoreBUFINT8G1ASTM65	Inquiry
STM65	MUX	RF Multiplexer, Differential, 4to2	CoreMUXRF4to21ASTM65	Inquiry
STM65	BUF	RF Buffer, CMOS, Push-Pull, Fmax 8GHz, for External Drive	CoreBUFEXT8G1ASTM65	Inquiry
STM65	DIV	Divide-By-Two, CMOS, up to 8GHz	CoreDIV28G1ASTM65	Inquiry
STM65	DIV	Divide-By-Three, CMOS, up to 8GHz	CoreDIV38G1ASTM65	Inquiry
STM65	DIV	Divide-By-Two IQ, CMOS, up to 8GHz	CoreDIV2IQ8G1ASTM65	Inquiry
STM65	DIV	Divide-By-Four IQ, CMOS, up to 8GHz	CoreDIV4IQ8G1ASTM65	Inquiry
STM65	D2S	RF Slicer, Differential to Single-Ended, up to 8GHz	CoreD2S8G1ASTM65	Inquiry
STM65	DIV	RF Pre-Divider, Control from Digital Logic, up to 8GHz	CoreDIVPRE8G1ASTM65	Inquiry
STM65	SYNC	Synchronizer, up to 6GHz	CoreSYNC6G1ASTM65	Inquiry
STM65	D2S	Reference Slicer, Differential to Single-Ended	CoreD2S500M1ASTM65	Inquiry
STM65	PD	Phase Detector, up to 52MHz	CorePD52M1ASTM65	Inquiry
STM65	CP	Charge Pump, tunable	CoreCP1ASTM65	Inquiry
STM65	LPF	Loop Filter, Tunable BW, Embedded 5bit ADC/DAC, Loop BW=200kHz	CoreLPF200k1ASTM65	Inquiry
STM65	DAC	Resistive DAC, 5b	CoreDACRES5b1ASTM65	Inquiry
STM65	ADC	SAR ADC with RDAC, 5b	CoreADC5bSAR1ASTM65	Inquiry
STM65	CNT	RF Counter, 16b	CoreCNT16b6G1ASTM65	Inquiry
GF130SOI	TOP	CoreFE: RF Front-End	CoreFERFGF130SOI	Inquiry
GF130SOI	BG	Voltage Reference, 1.2V	CoreBG1V21AGF130SOI	Inquiry
GF130SOI	LDO	Regulator, Tunable, 10mA, 2V	CoreLDO102V01AGF130SOI	Inquiry
GF130SOI	LDO	Regulator, Tunable, 10mA, 2V	CoreLDO102V01BGF130SOI	Inquiry
GF130SOI	BIAS	Constant-Gm bias	CoreBIAS1500u1AGF130SOI	Inquiry
GF130SOI	DET	PA detector	CoreDETPA1AGF130SOI	Inquiry
GF130SOI	SW	Switch SP2T, 2.5GHz	CoreSWSP2T2G51AGF130SOI	Inquiry
GF130SOI	POR	Power On Reset	CorePOR7u1AGF130SOI	Inquiry
GF130SOI	OSC	Ring oscillator, 100-400MHz	CoreOSC250M1AGF130SOI	Inquiry
GF130SOI	CP	Charge Pump, tunable	CoreCP200u1AGF130SOI	Inquiry
GF130SOI	LNA	Low Noise Amplifier, 2.36GHz-2.5GHz	CoreLNANF21AGF130SOI	Inquiry
GF130SOI	IF	SPI and Efuse	CoreIFSPI1AGF130SOI	Inquiry
GF130SOI	SW	Efuse Switch	CoreSWEFUSE19m1AGF130SOI	Inquiry
GF130SOI	MUX	Testmux 4bit	CoreMUXDC16to11AGF130SOI	Inquiry
GF130SOI	FIL	Harmonic filter -42dBm, 2.4GHz	CoreFILLPF2G41AGF130SOI	Inquiry
GF130SOI	DEC	Binary to Thermocoder, 3bit	CoreDECTH3b1AGF130SOI	Inquiry
GF130SOI	DEC	Binary to Thermocoder, 4bit	CoreDECTH4b1AGF130SOI	Inquiry
GF130SOI	DEC	Binary to Thermocoder, 5bit	CoreDECTH5b1AGF130SOI	Inquiry
GF130SOI	DEC	Binary to One-hot coder, 2bit	CoreDECOH2b1AGF130SOI	Inquiry
GF130SOI	DEC	Binary to One-hot coder, 3bit	CoreDECOH3b1AGF130SOI	Inquiry
GF130SOI	DEC	Binary to One-hot coder, 4bit	CoreDECOH4b1AGF130SOI	Inquiry
GF130SOI	OPA	Operational amplifier	CoreOPAS1AGF130SOI	Inquiry
GF130SOI	OPA	Operational amplifier	CoreOPA1AGF130SOI	Inquiry

Process	Type	Short Description	NAME	Mail
GF130SOI	LS	Level shifter low to high	CoreLSL2H1AGF130SOI	Inquiry
GF130SOI	LS	Level shifter	CoreLSDPN1AGF130SOI	Inquiry
GF130SOI	SW	SP4T RF switch	CoreSWSP4T2G41AGF130SOI	Inquiry
GF130SOI	SW	SPST RF switch	CoreSWSPST1AGF130SOI	Inquiry
GF130SOI	OSC	Ring oscillator, 100-400MHz	CoreOSC400M1AGF130SOI	Inquiry
GF130SOI	SSU	Programmable RF attenuator	CoreSSUSSU1AGF130SOI	Inquiry
GF130SOI	TOP	CoreLTEFE: RF Front-End for LTE mid-band application	CoreLTEFEFGF130SOI	Inquiry
GF130SOI	PA	Power amplifier, 1.8GHz	CorePA1G81AGF130SOI	Inquiry
GF130SOI	LNA	Low noise amplifier for GNSS	CoreLNAGNSS1AGF130SOI	Inquiry
GF130SOI	PROC	Process monitor	CorePROCPROC1AGF130SOI	Inquiry
GF130SOI	SW	SP4T RF switch	CoreSWSP4T1AGF130SOI	Inquiry
XH180	TOP	CoreADC: High-Resolution SAR ADC, 16b, 1MS/s	CoreADCSARXH180	Inquiry
XH180	BG	Voltage Reference with Cext Option, 1.2V	CoreBGEXT1V21AXH180	Inquiry
XH180	LDO	Regulator, Tunable, 10mA, 3V	CoreLDO103V01AXH180	Inquiry
XH180	LDO	Regulator, Tunable, 30mA, 3V	CoreLDO303V01AXH180	Inquiry
XH180	LDO	Regulator, Tunable, 10mA, 1.8V	CoreLDO101V81AXH180	Inquiry
XH180	LDO	Regulator, Tunable, 10mA, Programmable 1.8V/0.4V	CoreLDO10PG1AXH180	Inquiry
XH180	BIAS	Central Current Bias 12x16uA	CoreBIAS16u1AXH180	Inquiry
XH180	BIAS	Signal Ground Bias Voltage, Tunable	CoreBIASV1V51AXH180	Inquiry
XH180	BIAS	Voltage Bias Generator, 0V to 3V, 6bit	CoreBIASV0to3V1AXH180	Inquiry
XH180	BIAS	Voltage Bias Generator, 2V & 2.5V	CoreBIASV2V2V51AXH180	Inquiry
XH180	BIAS	Voltage Bias Generator, 0.6V to 1.4V, 6bit	CoreBIASV0V6to1V41AXH180	Inquiry
XH180	ADC	CoreADC: High-Resolution SAR ADC, 16b, 1MS/s	CoreADC16bSAR1AXH180	Inquiry
XH180	DAC	Capacitive DACs, 16bit (1d+7b+8b)	CoreDAC16b1AXH180	Inquiry
XH180	CMP	Comparator, Fmax 38.4MHz	CoreCMPOOC38M1AXH180	Inquiry
XH180	P2S	Parallel to Serial Converter, 8b, Fmax 600MHz	CoreP2S8b600M1AXH180	Inquiry
XH180	IF	LVDS interface Driver, Fmax 600MHz	CoreIFLVSDR1AXH180	Inquiry
XH180	IF	SLVS Interface Driver, Fmax 600MHz	CoreIFSLVSDR1AXH180	Inquiry
XH180	TSENS	Temperature Sensor, voltage output	CoreTSENS1AXH180	Inquiry
XH180	MUX	Multiplexer 2x 16 to 1	CoreMUXDC16to11AXH180	Inquiry
XH180	OPA	Operational amplifier	CoreOPA1AXH180	Inquiry
XH180	OPA	Rail-To-Rail Operational Amplifier	CoreOPAR2R1AXH180	Inquiry
XH180	DEC	Binary to One-hot coder, 6bit	CoreDECOH6b1AXH180	Inquiry
XH180	DEC	Binary to One-hot coder, 4bit	CoreDECOH4b1AXH180	Inquiry
XP180	TOP	CoreADC: High-Resolution SAR ADC, 14b, 1MS/s	CoreADCSARXP180	Inquiry
XP180	BG	Voltage Reference with Cext Option, 1.2V	CoreBGEXT1V21AXP180	Inquiry
XP180	LDO	Regulator, Tunable, 10mA, 4V	CoreLDO104V01AXP180	Inquiry
XP180	LDO	Regulator, 10mA, 1.8V	CoreLDO101V81AXP180	Inquiry
XP180	BIAS	Central Current Bias 6x16uA	CoreBIAS16u1AXP180	Inquiry
XP180	BIAS	Voltage Bias Generator, 6bit Tunable, rail to rail	CoreBIASVR2R1AXP180	Inquiry
XP180	BIAS	Voltage Bias Generator, Tunable	CoreBIASV2V1AXP180	Inquiry
XP180	ADC	Analog-to-Digital Converter, 17bit SAR	CoreADC17bSAR1AXP180	Inquiry
XP180	DAC	Capacitive DACs, 17bit (1d+8b+8b)	CoreDAC17b1AXP180	Inquiry
XP180	CMP	Comparator, Fmax 20MHz	CoreCMPOOC20M1AXP180	Inquiry
SGB25V	TOP	CoreVCO: High-Performance Radiation Hard SiGe VCOs, 0.8 .. 7.5 GHz	CoreVCOSGB25V	Inquiry
SGB25V	BG	Voltage Reference with Cext Option, 1.2V	CoreBGEXT1V21ASGB25V	Inquiry
SGB25V	LDO	Regulator, Tunable, 50mA, 4.8V	CoreLDO504V81ASGB25V	Inquiry
SGB25V	LDO	Regulator, Tunable, 50mA, 3.3V	CoreLDO503V31ASGB25V	Inquiry
SGB25V	LDO	Regulator, 50mA, 2.5V	CoreLDO502V51ASGB25V	Inquiry

Process	Type	Short Description	NAME	Mail
SGB25V	VCO	PMOS VCO 2.5V, 1.7-2.2 GHz	CoreVCO2G01ASGB25V	Inquiry
SGB25V	VCO	PMOS VCO 2.5V, 2.1-2.6 GHz	CoreVCO2G41ASGB25V	Inquiry
SGB25V	VCO	PMOS VCO 2.5V, 2.5-3.1 GHz	CoreVCO2G81ASGB25V	Inquiry
SGB25V	VCO	PMOS VCO 2.5V, 3.0-3.7 GHz	CoreVCO3G41ASGB25V	Inquiry
SGB25V	VCO	BJT VCO 4.8V + 2.5V, 2.9-3.6 GHz	CoreVCO3G31ASGB25V	Inquiry
SGB25V	VCO	BJT VCO 4.8V + 2.5V, 3.4-4.8 GHz	CoreVCO4G11ASGB25V	Inquiry
SGB25V	VCO	BJT VCO 4.8V + 2.5V, 4.5-5.9 GHz	CoreVCO5G21ASGB25V	Inquiry
SGB25V	VCO	BJT VCO 4.8V + 2.5V, 4.5-7.8 GHz	CoreVCO6G21ASGB25V	Inquiry
SGB25V	DIV	RF ECL divider, 3.3V + 2.5V, 8GHz	CoreDIV48G1ASGB25V	Inquiry
SGB25V	BUF	RF Output buffer, 3.3V + 2.5V, 8GHz	CoreBUFEXT8G1ASGB25V	Inquiry
SGB25V	DET	Differential High swing peak detector (5-14Vppd)	CoreDETPK1ASGB25V	Inquiry
SGB25V	CMP	Differential difference amplifier, 10MHz	CoreCMP10M1ASGB25V	Inquiry
TS22	TOP	CLK PLL	CoreCLKPLL3GTS22	Inquiry
TS22	VCO	VCO 3-6GHz	CoreVCO1ATS22	Inquiry
TS22	DIV	Divide by 2	CoreDIV21ATS22	Inquiry
TS22	DIV	Divide-by-N, up to 3GHz, Programmanble Division Number	CoreDIVN10bit1ATS22	Inquiry
TS22	DET	Lock Detector	CoreDET1ATS22	Inquiry
TS180	DCDC	CoreDCDC: High-Performance DCDC for Power management	CoreDCDCTS180	Inquiry
TS180	DRV	Output driver stage for DCDC	CoreDRVBPSNK1ATS180	Inquiry
TS180	CMP	Fast feedback comparator	CoreCMPF1ATS180	Inquiry
TS180	CMP	Comparator for hysteretic mode	CoreCMPH1ATS180	Inquiry
TS180	CMP	Comparator for clock timing control	CoreCMPCLK1ATS180	Inquiry
TS180	AMP	Feedback Error amplifier	CoreAMPHLD3V71ATS180	Inquiry
TS180	OSC	RC Oscillator, 3MHz/4MHz	CoreOSC4M1ATS180	Inquiry
TS180	DET	NMOS Zero Crossing detector	CoreDETZCDOCPN1ATS180	Inquiry
TS180	DET	PMOS 1.5A Over Current Protection	CoreDETSSOCP1ATS180	Inquiry
TS180	RAMP	Ramp generator	CoreRAMPSUMREF1ATS180	Inquiry
TS180	DLY	Rising edge delay cell for control circuits, 40ns	CoreDLY40n1ATS180	Inquiry
TS180	DLY	Rising edge delay cell for control circuits, 20ns	CoreDLY20n1ATS180	Inquiry
TS180	DLY	Rising edge delay cell for control circuits, 10ns	CoreDLY10n1ATS180	Inquiry
TS180	DLY	TON delay cell for hysteretic mode function	CoreDLYTON1ATS180	Inquiry
TS180	BIAS	BG Voltage bias generator, 1.0V to 1,5V	CoreBIASVDAC1ATS180	Inquiry
TS180	BIAS	Central Current Bias 12x0.5uA	CoreBIASIOu51ATS180	Inquiry
TS180	MUX	Testmux 5bit	CoreMUXDC32to11ATS180	Inquiry
TS180	DET	Dual voltage detector, 3.7V supply	CoreDET1ATS180	Inquiry
TS180	DIG	Digital controller for DCDC, asynchronous & synchronous parts	CoreDIGASYNCSYNCS1ATS180	Inquiry
TS180	DCDC	5A DCDC, 0.60...1.43V switching regulator using COT switch mode, Vin=4.25...15V	Core5ADDCCTS180	Inquiry
TS180	CMP	Current monitor comparator	CoreCMPIMon1ATS180	Inquiry
TS180	TIM	TON timer, provides COT switching time based on Vin and Vout	CoreTIMIO1ATS180	Inquiry
TS180	DRV	HS bootstrap driver for HS NMOS gate voltage generation	CoreDRVBNSM1ATS180	Inquiry
TS180	IRE	HS current replica block, 1:100'000	CoreIREHS1ATS180	Inquiry
TS180	IRE	LS current replica block, 1:100'000	CoreIRELS1ATS180	Inquiry
TS180	DAC	10-bit 1MHz R-2R DAC	CoreDACRES10b1ATS180	Inquiry
TS180	MUX	21-input testmux, with LU protection at output	CoreMUXDC21to11ATS180	Inquiry
TS180	DLY	Inverter based delay chain, 10ns	CoreDLY10nIN1ATS180	Inquiry
TS180	DLY	Inverter based delay chain, 5ns	CoreDLY5ns1ATS180	Inquiry

Process	Type	Short Description	NAME	Mail
TS180	DLY	Adjustable delay block for dual-phase regulator operation	CoreDLYAdDP1ATS180	Inquiry
TS180	CMP	Error comparator, for PWM generation in the DCDC	CoreCMPErr1ATS180	Inquiry
TS180	DET	Current monitor circuit, $V_{out}=1.2V+0.06V \cdot I_{load}$	CoreDETload1ATS180	Inquiry
TS180	CP	Charge pump, makes $V_{in}-3.3V$ voltage	CoreCP3v31ATS180	Inquiry
TS180	DET	HS current protection circuit	CoreDETOCPHS1ATS180	Inquiry
TS180	LDO	DCDC regu power stage, includes bootstrap regulator	CoreLDOBS1ATS180	Inquiry
TS180	DRV	HS power switch driver	CoreDRVSWHS1ATS180	Inquiry
TS180	DRV	LS power switch driver	CoreDRVSWLS1ATS180	Inquiry
TS180	LS	Levelshifter high-to-low, used in HS driver	CoreLSH2L1ATS180	Inquiry
TS180	LS	Levelshifter low-to-high, used in HS driver	CoreLSL2H1ATS180	Inquiry
TS180	AMP	Reference amplifier, with adjustable gm value	CoreAMPgm1ATS180	Inquiry
TS180	FB	Ripple injector	CoreFBrl1ATS180	Inquiry
TS180	DLY	10ns rising edge delay circuit, RC-based, trimmable	CoreDLY10nEd1ATS180	Inquiry
TS180	DLY	150ns rising edge delay circuit, not trimmable	CoreDLY150nEd1ATS180	Inquiry
TS180	DLY	20ns rising edge delay circuit, RC-based, trimmable	CoreDLY20nEd1ATS180	Inquiry
TS180	MUX	Analog signal MUX, 4:1, for on-chip analog signal monitoring	CoreMUXANA4to11ATS180	Inquiry
TS180	DET	Zero-cross detector and valley OCP block, trimmable	CoreDETZCDOCP1ATS180	Inquiry
TS180	CMP	Voltage sense comparator, relatively slow, <10mV offset	CoreCMP10m1ATS180	Inquiry
TS180	MUX	10-input testmux, with LU protection at output	CoreMUXIO10to11ATS180	Inquiry
TS180	ADC	1MHz SAR ADC, 10-bit, for telemetry measurements	CoreADC10bSAR1ATS180	Inquiry
TS180	BG	Bandgap (1.2V) + buffers + current bias	CoreBGBUF1V21ATS180	Inquiry
TS180	BG	Bandgap cell, 1.2V, trimmable, no buffering	CoreBG1V21ATS180	Inquiry
TS180	TSENS	Thermal sensor, $0.6V+8mV \cdot (T-0degC)$	CoreTSENSVout1ATS180	Inquiry
TS180	LDO	4.25V...15V to 3.3V/120mA LDO	CoreLDO1203V31ATS180	Inquiry
TS180	TSENS	Temperature sensor +85...+145degC, 3-bit digital output	CoreTSENS3bitout1ATS180	Inquiry
TS180	MUX	Analog signal MUX for telemetry purposes, 16:1	CoreMUXANA16to11ATS180	Inquiry

3 Process nodes

Process	Process Description
GF22	GlobalFoundries 22nm 22FDX
GF40	GlobalFoundries 40nm RFCMOS
GF55	GlobalFoundries 55nm CMOS
STM65	ST Microelectronics 65nm
GF130SOI	GlobalFoundries 130nm RFSOI
XH180	XFAB 180nm, Low Noise PMOS, 3.3V
XP180	XFAB 180nm, 5V MOS5 and 1.8V Low-Power MOS
SGB25V	IHP 250nm SiGe, 2.5V MOS + 7.5BVce BJT
TS180	TSMC 180nm

4 Contact us



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