

Complimentary Analog Products for the TMS320DM355 Digital Media Processor

	Best Performance	Best Value	Low Power
Video Amplifier	THS7315 ❖SOIC • 3 SDTV Video Amplifiers for CVBS, S-Video, Y'U'V etc... • 5.2V/V Gain (14.3dB)	OPA361 ❖SC70 • 3V Video Amp with Internal Gain and Filter • 2-Pole Reconstruction Filter • Integrated Level Shifter • Input Range Includes Ground – DC-Coupled Input	Rail-to-Rail Output Low Quiescent Current: 5.3 mA Shutdown Current: 1.5uA
Class-D Amplifier	TPA2013D1 ❖DSBGA ❖QFN • Constant Output Power • 1.8-V to 5.5-V Operation • 2.2-W into an 8-Ω Load from a 3.6-V Supply	TPA2010D1 ❖DSBGA • 2.5-W MONO Filter Free Class-D • Efficiency: 88% at 400mW, 80% at 100mW • Improved CMRR, PSRR	TPA2006D1 ❖SON • 1.45-W MONO Class-D • 2.8-mA Quiescent Current • 0.5-uA Shutdown Current
Low Power Voltage Ref	REF50xx ❖SOIC ❖MSOP • Low Temperature Drift (3ppm/°C (max)) • High Accuracy: .05% max • Low Noise (3uVPP/V)	REF33xx ❖SOIC ❖MSOP • Low Supply Current: 3.9uA (typ) • Low Temperature Drift: 30ppm/°C (max) • High Initial Accuracy: ±0.15% (max)	High Output Current: ±5mA
Audio Codec's Low-Power Stereo	AIC3107 ❖QFN • Stereo CODEC with Integrated MONO Class-D Amp • Audio ADC + Audio DAC • Seven Audio Input Pins	AIC3104 ❖QFN • Stereo Audio DAC+ADC • Six Audio Output Drivers • Automatic Gain Control • 14mW Stereo 48-kHz PB	AIC3254 ❖QFN • 4.1 mW Stereo 48ksp/s DAC Playback • 6.1 mW Stereo 48 ksp/s ADC Record • Low Power Bypass
Video DAC (Decoder)	TVP5150 ❖TQFP • Ultralow-Power NTSC/PAL Video Decoder • Two Composite Inputs or One S-Video Input • VBI Modes Supported Include: Teletext, Wide Screen Signaling, etc...		Macrovision Copy Protection Detection Ultralow Power Consumption: 113 mw (typical) Power-Down Mode: <1 mW
Low Power Touch Screen Controller	TSC2008 ❖QFN ❖DSBGA • 1.2V to 3.6V, 12-Bit, Nanopower, 4-Wire Micro TOUCH SCREEN CONTROLLER with SPI™ • Effective Throughput Rate: Up to 20kHz (8-Bit) or 10kHz (12-Bit) • Low Power (12-Bit, 8.2kHz Eq Rate): 30.4mA at 1.2V, fSCLK = 5MHz	1.5 x 2 WCSP-12 and 4 x 4 QFN-16 Packages 44.6mA at 2.7V, fSCLK = 10MHz	
Low Power Digital Temp Sensor	TMP102 ❖SOT • Low Quiescent Current – 10 uA (MAX) • 10 uA (MAX) shutdown current	• Accuracy: 0.5°C (–25°C to +85°C)	12-bit Resolution Supply Range: 1.4V to 3.6V

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	Best Performance	Best Value	Low Power
Clocks Programmable PLL Synthesizer	CDCE913	<ul style="list-style-type: none"> • Programmable 1-PLL VCXO Clock Synthesizer With 1.8-V and 3.3-V Outputs • Flexible Clock Driver 	
	❖TSSOP	<ul style="list-style-type: none"> • In-System Programmability and EEPROM (Serial Programmable Volatile Register and Nonvolatile EEPROM) • Flexible Input Clocking Concept (External Crystal: 8 MHz to 32 MHz) • Low-Noise PLL Core (PLL Loop Filter Components Integrated and Low Period Jitter (typical 50 ps)) • Separate Output Supply Pins 	
Low Power Wireless 2.4 GHz RF Transceiver	CC2525	<ul style="list-style-type: none"> • Wide Supply Range (2.0V – 3.8V) • Low Current Consumption (27 mA in RX, 31 mA in TX @ 0 dBm) • -87 dBm sensitivity (at 2 Mbps) 	CC2500 <ul style="list-style-type: none"> • Low Current Consumption (13.3 mA in RX, 250 kBaud) • Programmable data rate from 1.2 to 500 kBaud
	❖QFN	❖QFN	
Analog Front End	VSP01M01	<ul style="list-style-type: none"> • 10-bit Resolution • SNR 8 5dB @ 18 dB Gain • 2 channel 8-bit DAC 	VSP2582 <ul style="list-style-type: none"> • CCD Signal Processing • Programmable Gain Amp (PGA) • 85 mW at 3.0 V and 36 MHz, 1mW in Standby Mode
	❖SOIC ❖MSOP	❖QFN	
24/16/8-bit I/O Expander	TCA6424	<ul style="list-style-type: none"> • 24-bit I/O Expander • No Glitch on Power Up • 5-V Tolerant I/O Ports 	TCA6416 <ul style="list-style-type: none"> • 16-bit I/O Expander • Internal Power-On Reset • Noise Filter on SCL/SDA Inputs
	❖QFN	❖TSSOP ❖QFN ❖BGA	TCA6408 <ul style="list-style-type: none"> • 8-bit I/O Expander • Low Standby Current Consumption of 1 uA
Compact Flash Interface	CF4320H	<ul style="list-style-type: none"> • Compact Flash Bus-Interface Chip with ±15-kV ESD Protection, Translation, and Card-Detect Circuitry • Logic-Level Translation Between 1.8-V, 2.5-V, 3.3-V, and 5-V Supplies • Floating Input Conditions Allowed • Latch-Up Performance Exceeds 250 mA Per JESD 17 	
	❖LFBGA		
ESD Protection ±15-kV Array	TPD4E001	<ul style="list-style-type: none"> • 4-Channel ESD Protection • Low 1.5-pF Input Capacitance 	TPD2E001 <ul style="list-style-type: none"> • 2-Channel ESD Protection • Low 1-nA (MAX) Leakage Current • 0.9-V to 5.5-V Supply-Voltage Range • DRY, DRL and QFN PKG
	❖SOT	❖DRY ❖DRL ❖QFN	

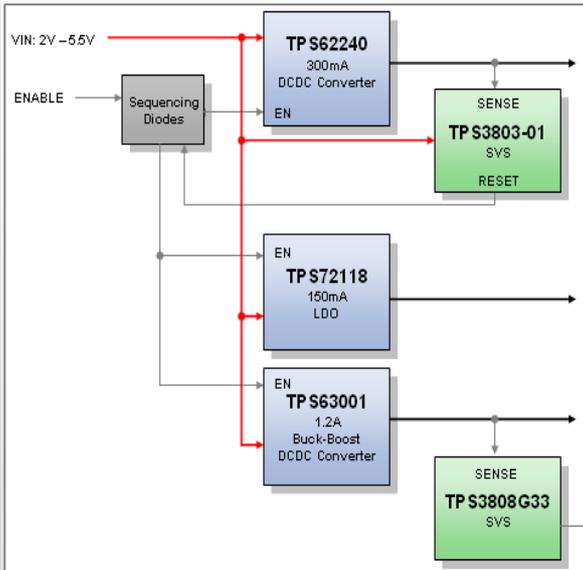
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SPRT511

Power Options for DM335/DM355

Highest efficiency

Wide Vin, high-efficiency discrete power solution

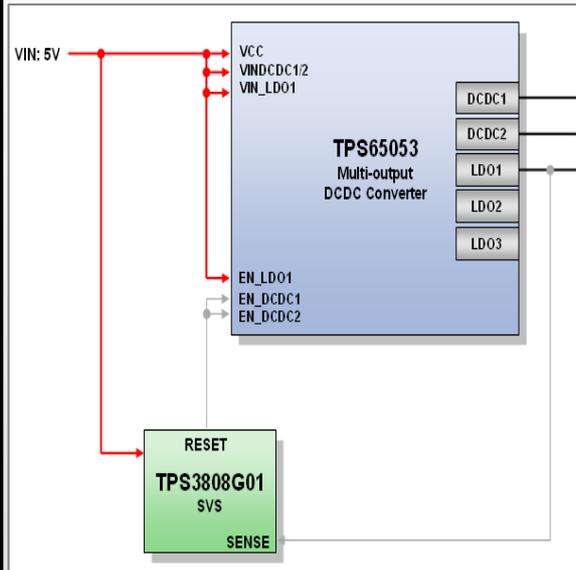


- 2V – 5.5V Input
- Up to 96% Efficiency
- Power Save Mode for Light Loads

Full Design Document: [SLVA288](#)

Most integration

Multiple-output DC/DC converter with integrated FETs

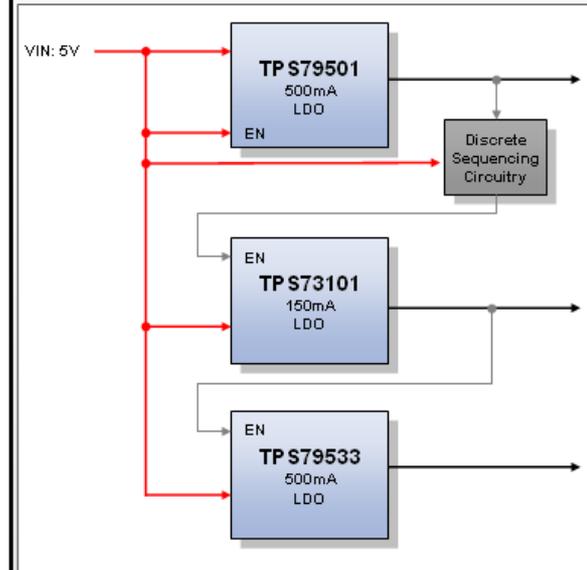


- 2 DCDC + 3 LDO's in 4x4mm QFN
- 2.25MHz for Small Inductors
- 180° Out-of-Phase Operation

Full Design Document: [SLVR330](#)

Simplest solution

LDO power solution



- No output cap required (TPS73101)
- No Inductors Required
- Small SON & SOT-23 packaging

Full Design Document: [SLVR331](#)

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SPRT511

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