Product Selector Guide

A&PM | Audio | Connectivity | Display | 2D/3D

dialog SEMICONDUCTOR

Audio and Power Management

Product	Description	Programmable regulators	Battery interface		Peripheral interface		LED driver	Footprint area	Targeted application processors
			Fast charger	Smart battery 1-wire UART	Integrated audio	Speaker driver			
DA9021	8 Channel PMIC subsystem	3 Buck + 5 Linear	v					4x4 WL-CSP 64	EM1, SH7724
DA9022	8 Channel 3.6V Buck PMIC subsytem	3 Buck + 5 Linear	v					4x4 WL-CSP 64	EM1, SH7724
DA9030	PMIC & speaker driver	2 Buck + 1 Boost + 19 Linear	v			v	v	8x8 BGA 184	PXA27x
DA9034	PMIC & Hi-Fi Audio/Voice CODEC	2 Buck + 1 Boost + 15 Linear	v	v	v	v	v	8x8 TFBGA 196	PXA310/320, PXA27x
DA9035	PMIC & Hi-Fi Audio/Voice CODEC	3 Buck + 1 Boost + 13 Linear	v	v	v	v	v	8x8 TFBGA 196	PXA93x
DA9036	RF Interface	0						5x5 BGA 64	PXA93x
DA9052	Flexible System PMIC + USB Power manager	4 Bucks + 1 Boost + 10 Linear	v				v	7x7 UFNBA 86 7x7 BGA 169	EM1, SH7724, iMX51, TCC92xx, S3C245x/S3C64xx
DA9053	Flexible High power system PMIC + USB Power manager	4 Buck + 1 Boost + 10 Linear	v				v	7x7 BGA 169 11x11 BGA 169	EM1, SH7724, AP20, iMX51/3, Armada610
DA9057	Programmable PMIC & Low Power CODEC with Class G HP	4 Buck +1 Boost + 10 Linear	v		v		v	7x7 BGA 169	EM1, SH7724
DA6001	SOC for Intel Z5xx Platform	2 bucks w ext. FETs, 2 bucks w integrated FETs, 7 LDOs, CK610 clock synthesizer						10x10 144 pin VFBGA	Intel Z5xx CPU + SCH + 2G DDDR2 memory + FW Hub
DA6011	SOC for Intel E6xx Platform	3 bucks w ext. FETS, 3 bucks w integrated FETS, 11 LDOs, 3 switching devices, CK505 clock synthesizer						11x11 169 pin VFBGA	Intel E6xx CPU + EG20T or ST STA2X11 or Oki ML7213 or ML7223 IO-Hub + 2GB DDR2 memory + SPI flash

Audio

Product	Description	ADC	DAC	Power consumption		Headphone	Control	General purpose filter engine	Package	Application processor support
		SNR A-weighted (dB) @ 48kHz	SNR A-weighted (dB) @ 48kHz	Record	Playback	Pout				
DA7210	Ultra Low Power Stereo CODEC	96 @ 2.5V	102 @ 2.5V	3.5mW @ 1.8V	2.5mW @1.8V	2x58mW @ 2.5V into 16Ω	2/4-wire	Yes	49-WLCSP 0.4mm	SH7724
DA7211	Ultra Low Power Stereo CODEC	96 @ 2.5V	102 @ 2.5V	3.5mW @ 1.8V	2.5mW @1.8V	2x58mW @ 2.5V into 16Ω	2-wire	Yes	36-WLCSP 0.5mm	SH7724

Product	Description	Pout @3.6V, 4Ω, 1% THD	Pout @3.6V, 8Ω, 1% THD	Efficiency @3.6V, 4Ω	Efficiency @3.6V, 8Ω	SNR A-weighted (dB)	THD_N (dB)	PSRR @ 217Khz (dB)	Package (Size, pitch)
DA7201	3.1W mono Class D Driver	1.3W @ 3.6V, 1% THD, 4Ω	600mW @3.6V THD 1%, R = 8Ω	90% @ 3.6V, Pout = 1.2W	90% @ 3.6V, Pout = 600mW	102dB @ 3.5V	90dB @ 500mW	90, Vripple = 100mVpp	9-WCSP
DA7250	2.9W mono I2s Input Class D driver	1.2W	700mW	85%	92%	97dB @ 3.6V	70dB @ 100mW	90dB, Vripple = 100mVpp	9-WLSCP

Display

Product	Description	Segments	Cascadable	Package			Footprint area
				VTLGA	BGA	Bumped bare die	
DA8527	E-Ink Segmented Display Driver	24		v			4X4 36 PIN
DA8521	E-Ink Segmented Display Driver	64	v	v		v	5X5 80PIN
DA8523	E-Ink Segmented Display Driver	192	v	v		v	7X12 208 PIN
DA8531	E-Ink Segmented Display Driver	64			v		5X5 80 PIN
DA8541	E-Ink Segmented Display Driver	96	v			v	N/A

Product	Description	Resolution	Colour depth	Assembly	Pad pitch	Interfaces
DA8620 Single chip	SmartXtend™ PMOLED driver	240RGB x 320	True 16Mcolours	COF/ COG	26um (Anodes) 30um (Cathodes)	Mipi DBI-2 option A,B and C Serial 3/4/5 wire RGB 18 bits

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2D/3D

Product	Description	3D depth	Native 3D support	Max display resolution	Max screen refresh	Parallax barrier driver	Display interface	Host interface	Footprint area
DA8223	Real time 2D-3D video converter IC	4 levels	Yes	XGA 1024 x 768 (landscape scan) WSVGA 1024 X 600 (landscape and portrait scan)	60Hz	Dual (portrait / landscape)	RGB 24 bit MIPI DSI (via external bridge IC)	I²C SPI	5x5 UFBGA 81 pin

Connectivity

Product			Radio				Memory versions			Processor		Main features					Software
Chip	Function	PA	DECT(6.0)	KDECT	JDECT	2.4GHz	Ext.	Flash	ROM	CPU MIPS	DSP MIPS	I/O	Handsfree amplifier	Charge control	Special features		Support
SC14450 **DECT**	Baseband						v			80	160	GPIO, UART, I²C, PCM, Microwire, SPI, USB, I²S	1.2W 4 Ohm	NiMH, Li-ion			Natalie CAT-iq/DECT protocol stack
SC14440 **DECT**	Baseband						v			80	80	GPIO, UART, I²C, Microwire, PCM, SPI, I²S	1.2W 4 Ohm	NiMH, Li-ion			Natalie CAT-iq/DECT protocol stack
LMX4180 **DECT**	Radio	4dBm	v		v							Microwire			FAD control		
LMX4281 **DECT**	Radio	4dBm				v						Microwire			FAD control		
LMX4181 **DECT**	Radio	-35 to 26dBm	v	v	v							Microwire			FAD control		
SC14480 **DECT**	Single chip	2dBm	v		v			v	v	40	80	GPIO, UART, I²C, PCM, SPI	0.5W 4 Ohm	NiMH, Li-ion			Natalie protocol stack
SC14491 **DECT headsets**	Single chip	2dBm	v		v		v			80	80	GPIO, UART, I²C, PCM, SPI, QSPI, I²S		USB V1.2: NiMH, Li-ion	Ultra long standby, DC/DC, G722.0, G726, G727, 727 SNS, CELT CODEC		Natalie protocol stack
SC14481 **DECT**	Single chip	-35 to 26dBm	v		v			v	v	40	80	GPIO, UART, I²C, PCM, SPI, I²S	0.5W 4 Ohm	NiMH, Li-ion	Ultra long standby		Natalie CAT-iq/DECT protocol stack
SC14441 **DECT**	Single chip	-35 to 26dBm	v	v	v		v			80	80	GPIO, UART, I²C, PCM, SPI, QSPI, I²S	0.5W 4 Ohm	NiMH, Li-ion	Ultra low power Ultra long standby		Natalie CAT-iq/DECT protocol stack
SC14443 **DECT**	Single chip	-35 to 26dBm	v		v		v			80	80	GPIO, 2x UART, 2x I²C, PCM, Microwire, 2x SPI, USB 2.0	2W, 4 Ohm, up to 48KHz	NiMH, Li-ion	Ultra low power, CELT CODEC, Dual DC/DC		
SC14444 **DECT**	Single chip	-35 to 26dBm	v		v		v			80	160	GPIO, 2x UART, 2x I²C, PCM, Microwire, 2x SPI, USB 2.0, Parallel LCD interface	2W, 4 Ohm, 2x 1W, 8 Ohm upto 48 KHz	NiMH, Li-ion	Ultra low power, Graphic DMA, Pixel processor, Dual DC/DC, CELT CODEC, Resistive Touch interface		Graphics Library
SC14281 **DECT**	Single chip	-35 to 23dBm				v			v	80	80	GPIO, UART, I²C, PCM, SPI, QSPI, I²S	0.5W 4 Ohm	NiMH, Li-ion	Ultra long standby		Natalie 2.4GHz protocol stack
SC14241 **DECT**	Single chip	-35 to 23dBm				v	v			80	80	GPIO, UART, I²C, PCM, SPI, QSPI, I²S	0.5W 4 Ohm	NiMH, Li-ion	Ultra long standby		Natalie 2.4GHz protocol stack
SC14488 **IAD**	Single chip	4dBm	v		v		v			40	80	GPIO, UART, I²C, PCM, SPI, I²S			6 voice channels		Natalie IAD CAT-iq protocol stack
LMX4113 **IAD**	PA	15 to 25dBm	v	v	v												
SC14452 **VoIP**	Processor						v			80	160	GPIO, UART, I²C, Microwire, 2x SPI, QSPI, PCM, Ethernet MII, DECT	1.2W 4 Ohm		4 VoIP channels		Rhea μClinux VoIP SW
SC14453 **VoIP**	Processor						v			136	250	GPIO, 2x UART, 2x I²C, 2x SPI, NAND, MMC/SD, QSPI, USB 1.1 Host, USB 2.0 OTG, PCM, Microwire, 24-bit RGB LCD interface, Ethernet MII, DECT	2W, 4 Ohm, 2x 1W, 8 Ohm upto 48 KHz	NiMH, Li-ion	OpenVG 1.1 Vector Graphics processor, Dual DC/DC, Resistive Touch interface, Cryptography accelerator, Secure boot		Rhea Linux VoIP SW, Qt
SC14461 **VoIP**	Processor						v			80	80	GPIO, UART, I²C, Microwire, 2x SPI, QSPI, PCM, Ethernet MII	1.2W 4 Ohm		2 VoIP channels		Rhea μClinux VoIP SW
SC14450 **Gaming**	Baseband						v			80	160	GPIO, UART, I²C, PCM, Microwire, 2x SPI, USB	1.2W 4 Ohm	NiMH, Li-ion	Audio + Real-Time data		Custom
LMX4281 **Gaming**	Radio					v						Microwire					
SC1424x **Gaming**	Single chip					v	v			80	80	GPIO, UART, I²C, PCM, QSPI, I²S	0.5W 4 Ohm	NiMH, Li-ion	Audio + Real-Time data		Custom

Product			Radio				Memory versions			Processor		Main features					Software
Module	Function	PA	DECT(6.0)	KDECT	JDECT	2.4GHz	External	Flash	ROM	External	Internal	I/O	Type approved	Voice codec	Data speed	Special features	Support
SC14CVM1.9xx **DECT**	Cordless Voice Module	22 to 25dBm	v					v	v	v		GPIO, UART, PCM, SPI		G726	24kb/s	Line interface	DECT protocol stack build-in
SC14CVM2.4xx **DECT**	Cordless Voice Module	25dBm				v		v	v	v		GPIO, UART, PCM, SPI		G726	24kb/s	Line interface	2.4GHz protocol stack build-in
SC14CVMDECTxxx (*) **DECT**	Cordless Voice Module	22 to 25dBm	v		(*)			v		v	v	GPIO, UART, PCM, SPI	TBR 6/FCC	G722 G726	60kb/s	CAT-iq Compliant	DECT protocol stack build-in
SC14CVM480 **IAD**	Cordless Voice Module	22 to 25dBm	v					v			v	UART, SPI, PCM		G722 G726		4 PCM voice channels	Natalie IAD CAT-iq protocol stack
SC14CVM488 **IAD**	Cordless Voice Module	22 to 25dBm	v				v				v	UART, PCM		G722 G726		4 PCM voice channels	Natalie IAD CAT-iq protocol stack
SC14WSMDATAxxx (*) **WSN**	Wireless Sensor Module	22 to 25dBm	v					v		v	v	GPIO, UART, SPI	TBR 6/FCC		60kb/s	Data + Ultra Low Power	Wireless Sensor Module DECT protocol

xx Product version / memory options (*) means available from September 2011

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