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Joy of innovation

**Smart Home Audio
2023**

Audio SoCs

- ARM® Cortex®-M0

Part No.	CPU	APROM	SRAM	I/O	Timer	ADC	RTC	Audio		Development Tools	Other	Package
								MIC.	Speaker			
ISD9130	Cortex®-M0 49 MHz	68 KB	12 KB	24	2	16-bit Sigma-Delta	✓	1	Class-D (1W)	ISD-DMK_9160	UART, I²C, I²S, PDMA, CRC	LQFP48 QFN33
ISD9160	Cortex®-M0 49 MHz	145 KB	12 KB	24	2	16-bit Sigma-Delta	✓	1	Class-D (1W)	ISD-DMK_9160	UART, I²C, I²S, PDMA, CRC	LQFP48 QFN33
ISD9160C	Cortex®-M0 49 MHz	145 KB	12 KB	24	2	16-bit Sigma-Delta	✓	1	Class-D (1W)	ISD-DMK_9160	UART, I²C, I²S, PDMA, CRC, VR	LQFP48 QFN33
ISD91230	Cortex®-M0 49 MHz	64 KB	12 KB	32	2	12-bit SAR	✓	1	Class-D (0.45W)	ISD-DMK_91260	UART, I²C, I²S, PDMA, CRC	LQFP64 QFN33
ISD91230B	Cortex®-M0 49 MHz	64 KB	12 KB	32	2	12-bit SAR 24-bit BridgeSense	✓	-	Class-D (0.45W)	ISD-DMK_91260B	UART, I²C, I²S, PDMA, CRC	LQFP64
ISD91260	Cortex®-M0 49 MHz	128 KB	12 KB	32	2	12-bit SAR	✓	1	Class-D (0.45W)	ISD-DMK_91260	UART, I²C, I²S, PDMA, CRC	LQFP64 QFN33
ISD91260B	Cortex®-M0 49 MHz	128 KB	12 KB	32	2	12-bit SAR 24-bit BridgeSense	✓	-	Class-D (0.45W)	ISD-DMK_91260B	UART, I²C, I²S, PDMA, CRC	LQFP64
ISD91260C	Cortex®-M0 49 MHz	128 KB	12 KB	32	2	12-bit SD	✓	1	Class-D (0.45W)	ISD-DMK_91260	UART, I²C, I²S, PDMA, CRC, VR	LQFP64 QFN33
ISD91530	Cortex®-M0 49 MHz	64 KB Flash	12KB	50	3	12-bit SAR 16-bit SD	-	1	Class-AB (0.02W)	ISD-DMK_91500	USB 2.0 FS	LQFP64 QFN48
ISD91535	Cortex®-M0 49 MHz	64 KB Flash	20KB	50	3	12-bit SAR 16-bit SD	-	1	Class-AB (0.02W)	ISD-DMK_91500	USB 2.0 FS	LQFP64 QFN48

• ARM® Cortex®-M4

Part No.	CPU	APROM	SRAM	I/O	Timer	ADC	RTC	Audio		Development Tools	Other	Package
								MIC.	Speaker			
ISD94124A	Cortex®-M4 200 MHz	512 KB	192 KB	57	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS VAD	LQFP64 QFN48
ISD94124B	Cortex®-M4 200 MHz, Basic feature	512 KB	192 KB	57	4	12-bit SAR	✓	-	-	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS	LQFP64 QFN48
ISD94124C	Cortex®-M4 200 MHz	512 KB	192 KB	57	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS, VAD, VR	LQFP64
ISD94124D	Cortex®-M4 200 MHz	512 KB	192 KB	57	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS, VAD, BF+NR	LQFP64
ISD94124P	Cortex®-M4 200 MHz	512 KB	192 KB	57	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS, VAD, VR, BF+NR	LQFP64
ISD94124S	Cortex®-M4 200 MHz	512 KB	192 KB	57	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS, VAD, AEC+NR	LQFP64
ISD941A24A	Cortex®-M4 200MHz Stereo CODEC MCP	512 KB	192 KB	29	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DEMO941A24	USB 2.0 FS, VAD	LQFP64
ISD941A24S	Cortex®-M4 200MHz Stereo CODEC MCP	512 KB	192 KB	29	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DEMO941A24	USB 2.0 FS, VAD, AEC+NR	LQFP64
ISD94123B	Cortex®-M4 200 MHz Basic Feature	512 KB	128 KB	57	4	12-bit SAR	✓	-	-	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS	LQFP64 QFN48
ISD94123S	Cortex®-M4 200 MHz	512 KB	128 KB	41	4	12-bit SAR	✓	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS, VAD, AEC+NR	QFN48

Part No.	CPU	APROM	SRAM	I/O	Timer	ADC	RTC	Audio		Developemnt Tools	Other	Package
								MIC.	Speaker			
ISD94113A	Cortex®-M4 200 MHz	256 KB	128 KB	57	4	12-bit SAR	√	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS, VAD	LQFP64 QFN48
ISD94113B	Cortex®-M4 200 MHz Basic Feature	256 KB	128 KB	57	4	12-bit SAR	√	-	-	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS	LQFP64 QFN48
ISD94113S	Cortex®-M4 200 MHz	256 KB	128 KB	57	4	12-bit SAR	√	4x DMIC	DPWM/I2S to ext. amp	ISD-DMK_94100_AM ISD-DMK_94100_DM	USB 2.0 FS, VAD, AEC+NR	LQFP64 QFN48

Audio Converters

• Audio CODEC Series - Mono CODEC

Part No.	Description	# of		SNR (dB)		THD (dB)		Sample Rate (KHz)	Audio Format	Development Tools	Control Interface	Analog/Digital (V)	Package
		ADC	DAC	ADC	DAC	ADC	DAC						
NAU8810	Mono Audio CODEC	1	1	91	93	-79	-84	8~48	I2S PCM(TDM)	NAU8810- DEMO	2-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN20 (4x4)
NAU88C10	Mono Audio CODEC	1	1	91	93	-79	-84	8~48	I2S PCM(TDM)	NAU88C10- DEMO	2-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN20 (4x4)
NAU88U10	Mono Audio CODEC (*AEC-Q100)	1	1	91	93	-79	-84	8~48	I2S PCM(TDM)	NAU88C10- DEMO	2-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN20 (4x4)
NAU8812	Mono Audio CODEC with Speaker Driver	1	1	91	93	-79	-84	8~48	I2S PCM(TDM)	NAU8812- DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (5x5) SSOP-28
NAU8814	Mono Audio CODEC with Speaker Driver, Equalizer	1	1	91	93	-79	-84	8~48	I2S PCM(TDM)	NAU8814- DEMO	2-Wire 3-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN24 (4x4)
NAU88C14	Mono Audio CODEC with Speaker Driver, Equalizer	1	1	91	93	-79	-84	8~48	I2S PCM(TDM)	NAU88C14- DEMO	2-Wire 3-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN24 (4x4)

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• Audio CODEC Series - Stereo CODEC

Part No.	Description	# of		SNR (dB)		THD (dB)		Sample Rate (KHz)	Audio Format	Development Tools	Control Interface	Analog/Digital (V)	Package
		ADC	DAC	ADC	DAC	ADC	DAC						
NAU8820	Stereo Audio CODEC	2	2	90	94	-80	-84	8 ~ 48	I2S PCM(TDM)	NAU8820- DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (5x5)
NAU8822A	Stereo Audio CODEC with Speaker Driver	2	2	90	94	-80	-84	8 ~ 48	I2S PCM(TDM)	NAU8822A- DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (5x5)
NAU88U22A	Stereo Audio CODEC with Speaker Driver (*AEC-Q100)	2	2	90	94	-80	-84	8 ~ 48	I2S PCM(TDM)	NAU8822A- DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (5x5)
NAU88C22	Stereo Audio CODEC with Speaker Driver	2	2	89	89	-78	-84	8 ~ 192	I2S PCM(TDM)	NAU88C22- DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (4x4) QFN32 (5x5)

• Audio CODEC Series - ULP (Ultra Low Power) CODEC

Part No.	Description	# of		SNR (dB)		THD (dB)		Sample Rate (KHz)	Audio Format	Development Tools	Control Interface	Analog/Digital (V)	Package
		ADC	DAC	ADC	DAC	ADC	DAC						
NAU88L11	ULP Mono Audio CODEC with Class-G Headphone Driver	1	1	103	105	-93	-85	8 ~ 96	I2S PCM(TDM)	NAU88L11-DEMO	2-Wire	1.6 ~ 2.0 1.6 ~ 3.6	QFN20(4x4)
*NAU88L20	ULP Stereo CODEC with Stereo Differential Lineout Driver	2	2	98	100	-91	-85	8 ~ 96	I2S PCM(TDM)		2-Wire	2.5 ~ 3.6 2.5 ~ 3.6	QFN32 (4x4)
NAU88L21	ULP Stereo Audio CODEC with Class-G Headphone Driver	2	2	103	105	-91	-80	8 ~ 192	I2S PCM(TDM)	NAU88L21-DEMO	2-Wire	1.6 ~ 2.0 1.6 ~ 3.6	QFN32 (4x4) QFN32 (5x5)
NAU88L24	ULP Stereo Audio CODEC with Advanced Headset Feature Class-D Amp	2	2	100	103	-85	-77	8 ~ 96	I2S PCM(TDM)	NAU88L24I-DEMO	2-Wire	1.6 ~ 2.0 1.6 ~ 3.6	QFN48 (6x6) QFN48 (7x7) WLCSP56
NAU88L25B	ULP Stereo Audio CODEC with Advanced Headset Feature & Detection Class-G Headphone Driver	1	2	101	124	-91	-89	8 ~ 192	I2S PCM(TDM)	NAU88L25-DEMO	2-Wire	1.6 ~ 2.0 1.6 ~ 3.6	QFN32 (5x5) WLCSP42

* Under Development

• Audio ADC Series

Part No.	Description	# of		SNR (dB)		THD (dB)		Sample Rate (KHz)	Audio Format	Development Tools	CTRL IF	Analog/Digital (V)	Package
		ADC	DAC	ADC	DAC	ADC	DAC						
NAU8501	Stereo Audio ADC with Line Input Differential Microphone Inputs	2	-	90	-	-80	-	8~48	I2S PCM(TDM)	NAU8501- DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (4x4)
NAU8502	Stereo Audio ADC with Differential Microphone Inputs	2	-	90	-	-80	-	8~48	I2S PCM(TDM)	NAU8502- DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (5x5)
NAU85L20	ULP Stereo Audio ADC with Integrated FLL Microphone Preamplifier	2	-	101	-	-91	-	8~96	I2S PCM(TDM)	NAU85L20- DEMO	2-Wire 3-Wire	1.6 ~ 2.0 1.6 ~ 3.6	QFN28 (4x4)
NAU85L40	ULP Quad Audio ADC with Integrated FLL Microphone Preamplifier	4	-	101	-	-91	-	8~96	I2S PCM(TDM)	NAU85L40- DEMO	2-Wire 3-Wire	1.6 ~ 2.0 1.6 ~ 3.6	QFN28 (4x4)

• Audio DAC Series

Part No.	Description	# of		SNR (dB)		THD (dB)		Sample Rate (KHz)	Audio Format	Development Tools	CTRL IF	Analog/Digital (V)	Package
		ADC	DAC	ADC	DAC	ADC	DAC						
NAU8401	Stereo Audio DAC with Speaker Driver	-	2	-	94	-	-84	8 ~ 48	I2S PCM(TDM)	NAU8401-DEMO	2-Wire 3-Wire 4-Wire	2.5 ~ 3.6 1.6 ~ 3.6	QFN32 (5x5)
NAU8402	Stereo Audio DAC with 2Vrms Line Output	-	2	-	98	-	-82	24 ~ 96	I2S PCM(TDM)	NAU8402-DEMO	-	3.0 ~ 3.6 1.6 ~ 3.6	TSSOP 16

• Precision ADC Series

Part No.	Description	# of		Resolution Bits	ADC Type	ENOB (Gain=1, 10SPS)	RMS Noise (PGA=128)	Sample Rate Max (Hz)	Gain	Development Tools	CTRL IF	Analog/Digital (V)	Package
		ADC	DAC										
NAU7802	Precision Audio ADC	2	-	24	Sigma-Delta	23	50nV in 10 SPS 150nV in 80 SPS	10, 20, 40, 80 & 320	1x, 2x, 4x, 8x, 16x, 32x, 64x, 128x	NAU7802-EVB	2-Wire	2.7 ~ 5.5 2.7 ~ 5.5	SOP16 PDIP16

Audio Amplifiers

- 2Vrms Line Driver Series

Part No.	Description	Output Performance		SNR (dB)	Output Noise (μVrms)	Gain (dB)	Standby Current (μA)	Operating Voltage (V)	Development Tools	Package
		Power (W)	THD+N (%)							
NAU8220	2Vrms Line Driver	-	<0.1	108	-	-	-	3.0 ~ 3.6	NAU8220WG-EVB	SOP14 TSSOP14

• Class-AB Series

Part No.	Description	Output Performance		SNR (dB)	Output Noise (μ Vrms)	Gain (dB)	Standby Current (μ A)	Operating Voltage (V)	Development Tools	Package
		Power (W)	THD+N (%)							
ISD8101	1.5W Class-AB Audio Amplifier with Chip Enable, Differential/ Single-Ended Inputs, Low Pop and Click	0.5 (5V,8 Ω)	<0.1	100	-	0 ~ 26	<1	2.4 ~ 5.5	ISD-DEMO8101	SOP8
		0.825 (5V,8 Ω)	<1							
		1.1 (5V,8 Ω)	<10							
ISD8102	2W Class-AB Audio Amplifier with Chip Enable, Single-Ended Inputs, Low Pop and Click	2 (5V,4 Ω)	<10	100	-	0 ~ 26	<1	2.0 ~ 5.5	ISD-DEMO8102	SOP8
ISD8104	2W Class-AB Audio Amplifier with Chip Enable, Differential Inputs, Low Pop and Click	2 (5V,4 Ω)	<10	100	-	0 ~ 26	<1	2.0 ~ 6.8	ISD-DEMO8104	SOP8

• Class D Series

Part No.	Description	Output Performance		SNR (dB)	Output Noise (μ Vrms)	Gain (dB)	Standby Current (μ A)	Operating Voltage (V)	Development Tools	Package
		Power (W)	THD+N (%)							
NAU82011	2.9W Mono Class-D Audio Amplifier with Variable Gain, Differential/Single-Ended Inputs	2.9 (5.0V,4 Ω)	<10	-	20	Variable	<1	2.5 ~ 5.5	NAU82011Y-EVB NAU82011V-EVB	QFN16 WLCSP9
NAU82039	3.2W Mono Class-D Audio Amplifier with Variable Gain, Differential/Single-Ended Inputs	3.2 (5.0V,4 Ω)	<10	-	27	6, 12	<1	2.5 ~ 5.5	-	QFN16 WLCSP9
NAU8223	3.1W Stereo Filer-Free Class-D Audio Amplifier with Differential/Single-Ended Inputs	3.1 (5.0V,4 Ω)	<10	-	20	0, 6, 12, 18, 24	<1	2.5 ~ 5.5	NAU8223-EVB	QFN20
NAU8224	3.1W Stereo Filer-Free Class-D Audio Amplifier with 2-Wire Interface, Differential/Single-Ended Inputs	3.1 (5.0V,4 Ω)	<10	-	20	0, 6, 12, 18, 24	<1	2.5 ~ 5.5	NAU8224-EVB	QFN20
NAU8315	3.1W Mono Filer-Free Class-D Audio Amplifier with I2S	3.1 (5.0V,4 Ω)	<10	-	12	3, 6, 9, 12	<1	2.5 ~ 5.5	NAU8315-DEMO	QFN20 WLCSP9 WLCSP12
NAU8325	3.1W Mono Filer-Free Class-D Audio Amplifier with I2S, 2-Wire Interface	3.1 (5.0V,4 Ω)	<10	-	18	3, 6, 9, 12	<2	2.5 ~ 5.5	NAU8325-DEMO	QFN20
NAU83P20	20W High-Efficiency Class-D Audio Power Stage for Driving Stereo Bridge-Tied Speakers	20W (18.0V,8 Ω)	<10	105	-	-	<1	4.5 ~ 24	-	QFN48

• Smart Amp Series

Part No.	Description	Output Performance		SNR (dB)	Output Noise (μ Vrms)	Speaker Protection	Standby Current (μ A)	Operating Voltage (V)	Development Tools	Package
		Power (W)	THD+N (%)							
NAU83G10	12W Mono Boosted Class-D Amplifier with Klippel Controlled Sound DSP	8 (5.0V,4 Ω) 6.5 (5.0V,8 Ω)	<10	101	55	Integrated DSP	<13	2.9 ~ 5.5	NAD- NAU83G10	WLCSP50
NAU83G20	20W Mono Boosted Class-D Amplifier with Klippel Controlled Sound DSP	20 (12.6V,4 Ω) 11 (12.6V,8 Ω)	<10	101	65	Integrated DSP	<16	14 (MAX)	NAD- NAU83G20	WLCSP50
*NAU83G60	30W Stereo / 60W Mono Boosted Class-D Amplifier with Klippel Controlled Sound DSP	30 (18V,4 Ω)	<10	-	-	Integrated DSP	-	6 ~ 18	-	QFN56

* Under Development

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Audio Enhancement

Part No.	Description	HW Configuration					Algorithms									
		I ² S Stereo Inputs	ADC Stereo Inputs	I ² S Stereo Output	DAC Single Output	Power Output	Bass	Pro. Eq.	3D	Treble	Volume	Level	Dialog	DRC	V3D	Package
NPCP215F	MaxxAudio	4	0	3	0	20W (8R)	Y	Y	Y	Y	Y	Y	Y	-	-	QFN48
NPCA112D	MaxxAudio	4	0	3	0	-	Y	Y	Y	Y	Y	Y	Y	-	-	QFN32
NPCA110P	MaxxAudio	2	3	3	4	-	Y	Y	Y	Y	Y	Y	Y	-	-	QFN40
NPCA110T	MaxxAudio	3	0	3	3	-	Y	Y	Y	Y	Y	Y	Y	-	-	QFN32
NPCA110D	MaxxAudio	3	0	3	0	-	Y	Y	Y	Y	Y	Y	Y	-	-	QFN32
NPCA110B	MaxxAudio	1	2	1	2	-	Y	Y	-	-	Y	-	-	-	-	QFN32
NPCA120D	DPS	2	0	2	0	-	Y	Y	Y	Y	Y	Y	Y	Y	-	LQFP64
NPCA121D	DPS	3	0	3	0	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	LQFP64

ISD ChipCorder®

• Digital ChipCorder® Series

Part No.	Description	Duration	Sample Rate (KHz)	Operating Voltage (V)	Development Tools	Temp (°C)	Package
ISD15102	Multi-Message, Record/Playback with Int. Flash Memory, SPI	2 min	Up to 48	2.7 ~ 3.6	ISD-DMK_15100	-40 ~ 85°C	LQFP48
ISD15104		4 min					
ISD15108		8 min					
ISD15C00	Multi-Message, Record/Playback with Int. Flash Memory, SPI (*AEC-Q100)	Ext. Flash up to 64 min	Up to 48	2.7 ~ 3.6	ISD-DMK_15C00	AEC-Q100	LQFP48
ISD15D00	Multi-Message, Playback-Only with Ext. Flash Memory, SPI (*AEC-Q100)	Ext. Flash up to 64 min	Up to 48	2.7 ~ 5.5	ISD-DMK_15D00	AEC-Q100	QFN32
ISD2115A	Multi-Message, Playback-Only with Int. Flash Memory, SPI	16 sec	Up to 32	2.7 ~ 3.6	ISD-DMK_2100_Q	-40 ~ 85°C	SOP14 QFN20
ISD2130		32 sec					
ISD2360	Multi-Message, 3-Channel Audio, Playback-Only with Int. Flash Memory	64 sec	Up to 32	2.4 ~ 5.5	ISD-DMK_2360_Q	-40 ~ 85°C	SOP16 QFN32
ISD2361	Multi-Message, 3-Channel Audio, Playback-Only with Int. Flash Memory, SPI	60 sec + Ext. Flash up to 1024 min	Up to 32	2.4 ~ 5.5	ISD-DMK_2361	-40 ~ 105°C	SOP16 QFN32
ISD3800	Multi-Message, Playback-only with ext. Flash Memory, SPI	Ext. Flash up to 64 min	Up to 48	2.7 ~ 5.5	ISD-DMK_3800	-40 ~ 85°C	LQFP48 QFN32
ISD3900	Multi-Message, Record/Playback with ext. Flash Memory, SPI	Ext. Flash up to 64 min	Up to 48	2.7 ~ 3.6	ISD-DMK_3900	-40 ~ 85°C	LQFP48

• MLS ChipCorder® Series

Part No.	Description	Duration	Sample Rate (KHz)	Operating Voltage (V)	Development Tools	Temp (°C)	Package	
ISD14B20	Multi-Message Record/Playback with Int. Flash Memory, SPI	32 sec	Up to 12	2.4 ~ 5.5		0 ~ 50	DIE	
ISD14B40		64 sec						
ISD14B80		128 sec						
ISD1610B	Single-Message Record/Playback with Int. Flash Memory	16 sec	Up to 12	2.4 ~ 5.5	I16-COB20	0 ~ 50 -40 ~ 85	DIE SOIC16	
ISD1616B		32 sec						
ISD1620B		64 sec						
ISD1730	Multi-Message, Record/Playback with Int. Flash Memory, SPI	32 sec	Up to 12	2.4 ~ 5.5	ISD-COB1730	0 ~ 50 -40 ~ 85	DIE SOIC28	
ISD1760		64 sec			ISD-COB1760			
ISD17120		128 sec			ISD-COB17150			
ISD17240		256 sec			ISD-COB17240			
ISD1806	Single-Message Record/Playback with Int. Flash Memory	6 sec	Up to 8	2.7 ~ 4.5	ISD-COB1810	0 ~ 50	DIE	
ISD1810		8 sec						
ISD18A04		4 sec		2.4 ~ 5.5	ISD-COB18A04			
ISD18B12		6 sec		2.4 ~ 5.5	ISD-COB18B24			
ISD18B24		12 sec		2.7 ~ 4.5	ISD-COB18C10			
ISD18C10		8 sec						
ISD1916	Multi-Message, Record/Playback with Int. Flash Memory	16 sec	Up to 12	2.4 ~ 5.5	ISD-DEMO1964	-40 ~ 85	SOIC28	
ISD1932		32 sec						
ISD1964		64 sec						
ISD4002	Multi-Message Record/Playback with Int. Flash Memory, SPI	2 ~ 16 min	Up to 8	2.7 ~ 3.3		0 ~ 50 0 ~ 70 -40 ~ 85	DIE PDIP28 SOIC28	
ISD4003								
ISD4004								

Part No.	Description	Duration	Sample Rate (KHz)	Operating Voltage (V)	Development Tools	Temp (°C)	Package
ISD5102	Multi-Message Record/Playback with Int. Flash Memory, I2C	2 ~ 16 min	Up to 8	2.7 ~ 3.3		0 ~ 50 0 ~ 70 -40 ~ 85	DIE PDIP28 SOIC28
ISD5104							
ISD5108							
ISD5116							

Development Tools for Audio SoCs

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NU-NULINKISD	NU-NULINKISD	ISD-NU-LINK	ISD9100 Series ISD91200 Series ISD91500 Series ISD94100 Series	• ISD-NU-LINK	• USB Dongle • Support ICP (In-Circuit Programming)	
NM-ISD9160	NM-ISD9160	ISD-DMK_9160	ISD9100 Series	• ISD-DEMO9160 • ISD-NU-LINK • ISD-9160-Touch • ISD-9160-KB • Speaker	• Evaluation and Demo Kit for ISD9100 Series	
NT-ISD9160	NT-ISD9160	ISD-DEMO9160	ISD9100 Series	• ISD-DEMO9160	• Demo Board for ISD9100 Series • Connect to PC via ISD NU-LINK for programming and evaluation	
NP-ISD9160-T	NP-ISD9160-T	ISD-9160-TOUCH	ISD9100 Series	• ISD-9160-TOUCH	• 8-input Touch Pad for NT-ISD9160	
NP-ISD9160-K	NP-ISD9160-K	ISD-9160-KB	ISD9100 Series	• ISD-9160-KB	• 8-input Key Pad for NT-ISD9160	
NM-ISD91260	NM-ISD91260	ISD-DMK_91260	ISD91200C Series	• ISD-DEMO91260 • ISD-NU-LINK • Speaker	• Evaluation and Demo Kit for ISD91200C Series	
NM-ISD91260B	NM-ISD91260B	ISD-DMK_91260B	ISD91200B Series	• ISD-DEMO91260B • ISD-NU-LINK • Speaker	• Evaluation and Demo Kit for ISD91200B Series	
NT-ISD91260	NT-ISD91260	ISD-DEMO91260	ISD91200C Series	• ISD-DEMO91260	• Demo Board for ISD91200C Series • Connect to PC via ISD NU-LINK for programming and evaluation	
NT-ISD91260B	NT-ISD91260B	ISD-DEMO91260B	ISD91200B Series	• ISD-DEMO91260B	• Demo Board for ISD91200B Series • Connect to PC via ISD NU-LINK for programming and evaluation	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NM-ISD91500	NM-ISD91500	ISD-DMK_91500	ISD91500 Series	• NT-ISD91500 • ISD-NU-LINK • Speaker	• Evaluation and Demo Kit for ISD91500 Series	
NM-I94100_AM	NM-I94100_AM	ISD-DMK_94100_AM	ISD94100 Series	• NL-ISD94124A • NP-I94124_AM • Speaker	• Evaluation and Demo Kit for ISD94100 Series • Connect with Analog Microphone Adaptor	
NM-I94100_DM	NM-I94100_DM	ISD-DMK_94100_DM	ISD94100 Series	• NL-ISD94124A • NP-I94124_DM • Speaker	• Evaluation and Demo Kit for ISD94100 Series • Connect with Digital Microphone Adaptor	
NL-ISD94124A	NL-ISD94124A	EVB-I94124	ISD94100 Series	• EVB-I94124	• Evaluation and Demo Kit for ISD94100 Series	
NP-I94124_AM	NP-I94124_AM	EVB-I94124ADI-NAU85L40B_V1.0	ISD94100 Series	• EVB-I94124ADI-NAU85L40B_V1.0	• Analog Microphone Adaptor for NL-ISD94124A	
NP-I94124_DM	NP-I94124_DM	EVB-I94124ADI-NAU85L40B_V1.2	ISD94100 Series	• EVB-I94124ADI-NAU85L40B_V1.2	• Analog / Digital Microphone Adaptor for NL-ISD94124A	
NV-ISD94100	NV-ISD94100	DEMO-I94100-NAU88C22	ISD94100 Series	• DEMO-I94100-NAU88C22	• ISD94100 Demo Board with audio CODEC (NAU88C22) on board • Connect to PC via ISD NU-LINK for programming and evaluation	
NV-ISD941A24	NV-ISD941A24	ISD-DEMO941A24	ISD941A24	• ISD-DEMO941A24	• Demo Board for ISD941A24	
NW-ISD9160	NW-ISD9160	ISD-ES9160_Prog_F	ISD9160 LQFP	• ISD-ES9160_Prog_F	• ISD9160 LQFP Single Socket Programmer • Connect to PC via ISD NU-LINK for programming and evaluation	
NG-ISD9160	NG-ISD9160	ISD-9160_GANG_Prog_F	ISD9160 LQFP	• ISD-9160_GANG_Prog_F	• ISD9160 LQFP Standalone Gang Programmer	

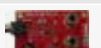
Development Tools for Audio Converters

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NU-NAUSB2I2C	NU-NAUSB2I2C	USB-To-I2C/I2S_V1.1	NAU88C22 NAU88L11 NAU88L21 NAU88L24I NAU88L25 NAU85L20 NAU85L40 NAU7802	• USB-To-I2C/I2S_V1.1	• USB-To-I2C/I2S_V1.1 Control Board for Audio Converters	
NL-NAU88C10	NL-NAU88C10	NAU88C10-DEMO	NAU88C10	• NAU88C10-DEMO	• Demo Board for NAU88C10YG	
NL-NAU88C22	NL-NAU88C22	NAU88C22-DEMO	NAU88C22	• NAU88C22-DEMO	• Demo Board for NAU88C22YG	
NL-NAU88L11	NL-NAU88L11	NAU88L11-DEMO	NAU88L11	• NAU88L11-DEMO	• Demo Board for NAU88L11YG	
NL-NAU88L21	NL-NAU88L21	NAU88L21-DEMO	NAU88L21	• NAU88L21-DEMO	• Demo Board for NAU88L21YG	
NL-NAU88L24I	NL-NAU88L24I	NAU88L24I-DEMO	NAU88L24	• NAU88L24I-DEMO	• Demo Board for NAU88L24IG	
NL-NAU88L25	NL-NAU88L25	NAU88L25-DEMO	NAU88L25B	• NAU88L25-DEMO	• Demo Board for NAU88L25YGB	
NL-NAU85L20	NL-NAU85L20	NAU85L20-DEMO	NAU85L20B	• NAU85L20-DEMO	• Demo Board for NAU85L20YGB	
NL-NAU85L40	NL-NAU85L40	NAU85L40-DEMO	NAU85L40B	• NAU85L40-DEMO	• Demo Board for NAU85L40YGB	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NL-NAU85L40S	NL-NAU85L40S	NAU85L40S-DEMO	NAU85L40S	• NAU85L40S-DEMO	• Demo Board for NAU85L40YGB with Single-ended Microphone	
NL-NAU7802	NL-NAU7802	NAU7802-EVB	NAU7802	• NAU7802-DEMO	• Demo Board for NAU7802	
NV-NAU8812	NV-NAU8812	NAU8812-DEMO	NAU8812	• NAU8812-DEMO	• Compact Audio Base Board + NAU8812YG Daughter Card	
NV-NAU88C14	NV-NAU88C14	NAU88C14-DEMO	NAU88C14	• NAU88C14-DEMO	• Compact Audio Base Board + NAU88C14YG Daughter Card	
NV-NAU8814	NV-NAU8814	NAU8814-DEMO	NAU8814	• NAU8814-DEMO	• Compact Audio Base Board + NAU8814YG Daughter Card	
NV-NAU8820	NV-NAU8820	NAU8820-DEMO	NAU8820	• NAU8820-DEMO	• Compact Audio Base Board + NAU8820YG Daughter Card	
NV-NAU8501	NV-NAU8501	NAU8501-DEMO	NAU8501	• NAU8501-DEMO	• Compact Audio Base Board + NAU8501YG Daughter Card	
NV-NAU8502	NV-NAU8502	NAU8502-DEMO	NAU8502	• NAU8502-DEMO	• Compact Audio Base Board + NAU8502YG Daughter Card	
NV-NAU8401	NV-NAU8401	NAU8401-DEMO	NAU8401	• NAU8401-DEMO	• Compact Audio Base Board + NAU8401YG Daughter Card	
NV-NAU8402	NV-NAU8402	NAU8402-DEMO	NAU8402	• NAU8402-DEMO	• Compact Audio Base Board + NAU8402YG Daughter Card	
NT-NAU8812	NT-NAU8812	NAU8812-Card	NAU8812	• NAU8812-Card	• NAU8812YG Daughter Card	
NT-NAU88C14	NT-NAU88C14	NAU88C14-Card	NAU88C14	• NAU88C14-Card	• NAU88C14YG Daughter Card	
NT-NAU8814	NT-NAU8814	NAU8814-Card	NAU8814	• NAU8814-Card	• NAU8814YG Daughter Card	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NT-NAU8820	NT-NAU8820	NAU8820-Card	NAU8820	• NAU8820-Card	• NAU8820YG Daughter Card	
NT-NAU8501	NT-NAU8501	NAU8501-Card	NAU8501	• NAU8501-Card	• NAU8501YG Daughter Card	
NT-NAU8502	NT-NAU8502	NAU8502-Card	NAU8502	• NAU8502-Card	• NAU8502YG Daughter Card	
NT-NAU8401	NT-NAU8401	NAU8401-Card	NAU8401	• NAU8401-Card	• NAU8401YG Daughter Card	
NT-NAU8402	NT-NAU8402	NAU8402-Card	NAU8402	• NAU8402-Card	• NAU8402WG Daughter Card	

Development Tools for Audio Amplifiers

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NE-NAU8220	NE-NAU8220	NAU8220WG-EVB	NAU8220	• NAU8220WG-EVB	• Demo Board for NAU8220WG	
NT-ISD8101	NT-ISD8101	ISD-DEMO8101	ISD8101	• ISDI8101-DEMO	• Demo Board for I8101SYI	
NT-ISD8102	NT-ISD8102	ISD-DEMO8102	ISD8102	• ISD8102-DEMO	• Demo Board for I8102SYI	
NT-ISD8104	NT-ISD8104	ISD-DEMO8104	ISD8104	• ISD8104-DEMO	• Demo Board for I8104SYI	
NE-NAU82011V	NE-NAU82011V	NAU82011V-EVB	NAU82011	• NAU82011V-EVB	• Demo Board for NAU82011VG	
NE-NAU82011Y	NE-NAU82011Y	NAU82011Y-EVB	NAU82011	• NAU82011Y-EVB	• Demo Board for NAU82011YG	
NE-NAU8223	NE-NAU8223	NAU8223-EVB	NAU8223	• NAU8223-EVB	• Demo Board for NAU8223YG	
NE-NAU8224	NE-NAU8224	NAU8224-EVB	NAU8224	• NAU8224-EVB	• Demo Board for NAU8224YG	
NU-NAU8224	NU-NAU8224	NAU-ES_MINI_USB	NAU8224	• NAU-ES_MINI_USB	• USB to I ² C Bus Dongle for NE-NAU8224	
NL-NAU8315	NL-NAU8315	NAU8315-DEMO	NAU8315	• NAU8315-DEMO	• Demo Board for NAU8315YG	
NL-NAU8315B	NL-NAU8315B	NAU8315B-DEMO	NAU8315	• NAU8315B-DEMO	• Demo Board for NAU8315B31VG	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NL-NAU8325	NL-NAU8325	NAU8325-DEMO	NAU8325	• NAU8325-DEMO	• Demo Board for NAU8325YG	
NV-NADBASE	NV-NADBASE	NAD-BASE BOARD	NAU83G10 NAU83G20	• NAD-BASE BOARD	• Base Board of Smart Amp Series REVB	
NT-NAU83G10	NT-NAU83G10	NAU83G10-ADP	NAU83G10	• NAU83G10-ADP	• NAU83G10 Daughter Card	
NT-NAU83G20	NT-NAU83G20	NAU83G20-ADP	NAU83G20	• NAU83G20-ADP	• NAU83G20 Daughter Card	
NV-NAU83G10S	NV-NAU83G10S	NAD-NAU83G10	NAU83G10	• NAU83G10-EVB	• Demo Board for NAU83G10 Stereo	
NV-NAU83G20S	NV-NAU83G20S	NAD-NAU83G20	NAU83G20	• NAU83G20-EVB	• Demo Board for NAU83G20 Stereo	
NM-N83G10MA	NM-N83G10MA	NAD-NAU83G10_ BRS-161200	NAU83G10	• NAD-NAU83G10_ BRS-161200	• Demo Board for NAU83G10 Mono with Bujeon BRS-161200	
NM-N83G10MB	NM-N83G10MB	NAD-NAU83G10_ BRS-181300	NAU83G10	• NAD-NAU83G10_ BRS-181300	• Demo Board for NAU83G10 Mono with Bujeon BRS-181300	
NM-N83G10SA	NM-N83G10SA	NAD-NAU83G10_ 2*BRS-161200	NAU83G10	• NAD-NAU83G10_ 2*BRS-161200	• Demo Board for NAU83G10 Stereo with 2x Bujeon BRS-161200	
NM-N83G10SB	NM-N83G10SB	NAD-NAU83G10_ 2*BRS-181300	NAU83G10	• NAD-NAU83G10_ 2*BRS-181300	• Demo Board for NAU83G10 Stereo with 2x Bujeon BRS-181300	
NM-N83G20MA	NM-N83G20MA	NAD-NAU83G20_ BUF-4203	NAU83G20	• NAD-NAU83G20_ BUF-4203	• Demo Board for NAU83G20 Mono with Bujeon BUF-4203	
NM-N83G20SA	NM-N83G20SA	NAD-NAU83G20_ 2*BUF-4203	NAU83G20	• NAD-NAU83G20_ 2*BUF-4203	• Demo Board for NAU83G20 Stereo with 2x Bujeon BUF-4203	

Development Tools for ISD ChipCorder®

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NU-ISDMINUSB	NU-ISDMINUSB	ISD-ES_Mini_USB	ISD2130 / ISD2115A ISD2360 ISD2361 ISD3900 ISD15102/04/08 ISD15C00 ISD3800 ISD15D00	• ISD-ES_Mini_USB	• USB dongle for Digital ChipCorder Demo Board	
NM-ISD2100Q	NM-ISD2100Q	ISD-DMK_2100_Q	ISD2130 / ISD2115A	• ISD-DEMO2100_Q • ISD-ES_MINI_USB • Speaker	• Evaluation and Demo Kit for ISD2130 / ISD2115A	
NT-ISD2100S	NT-ISD2100S	ISD-DEMO2100_S	ISD2130 / ISD2115A	• ISD-DEMO2100_S	• Demo Board for ISD2130SY1 • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NT-ISD2100Q	NT-ISD2100Q	ISD-DEMO2100_Q	ISD2130 / ISD2115A	• ISD-DEMO2100_Q	• Demo Board for ISD2130YY1 • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NM-ISD2360Q	NM-ISD2360Q	ISD-DMK_2360_Q	ISD2360	• ISD-DEMO2360_Q • ISD-ES_MINI_USB • Speaker	• Evaluation and Demo Kit for ISD2360	
NT-ISD2360S	NT-ISD2360S	ISD-DEMO2360_S	ISD2360	• ISD-DEMO2360_S	• Demo Board for ISD2360SY1 • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NT-ISD2360Q	NT-ISD2360Q	ISD-DEMO2360_Q	ISD2360	• ISD-DEMO2360_Q	• Demo Board for ISD2360YYI • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NT-ISD2361	NT-ISD2361	ISD-DEMO2361_Q	ISD2361	• ISD-DEMO2361_Q	• Demo Board for ISD2361YYI • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NM-ISD3900	NM-ISD3900	ISD-DMK_3900	ISD3900	• ISD-DEMO3900 • ISD-ES_MINI_USB • Speaker	• Evaluation and Demo Kit for ISD3900	
NT-ISD3900	NT-ISD3900	ISD-DEMO3900	ISD3900	• ISD-DEMO3900	• Demo Board for ISD3900FYI • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NM-ISD15100	NM-ISD15100	ISD-DMK_15100	ISD15102/04/08	• ISD-DEMO15100 • ISD-ES_MINI_USB • Speaker	• Evaluation and Demo Kit for ISD15102/04/08	
NT-ISD15100	NT-ISD15100	ISD-DEMO15100	ISD15102/04/08	• ISD-DEMO15100	• Demo Board for ISD15102/04/08FYI • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NM-ISD15C00	NM-ISD15C00	ISD-DMK_15C00	ISD15C00	• ISD-DEMO15C00 • ISD-ES_MINI_USB • Speaker	• Evaluation and Demo Kit for ISD15C00	
NT-ISD15C00	NT-ISD15C00	ISD-DEMO15C00	ISD15C00	• ISD-DEMO15C00	• Demo Board for ISD15C00FYI • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NM-ISD3800	NM-ISD3800	ISD-DMK_3800	ISD3800	• ISD-DEMO3800 • ISD-ES_MINI_USB • Speaker	• Evaluation and Demo Kit for ISD3800	
NT-ISD3800	NT-ISD3800	ISD-DEMO3800	ISD3800	• ISD-DEMO3800	• Demo Board for ISD3800FYI • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NM-ISD15D00	NM-ISD15D00	ISD-DMK_15D00	ISD15D00	• ISD-DEMO15D00 • ISD-ES_MINI_USB • Speaker	• Evaluation and Demo Kit for ISD15D00	
NT-ISD15D00	NT-ISD15D00	ISD-DEMO15D00	ISD15D00	• ISD-DEMO15D00	• Demo Board for ISD15D00YYI • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NC-ISD1620B	NC-ISD1620B	I16-COB20	ISD1610/16/20	• I16-COB20	• Demo Board for ISD1610/16/20	
NC-ISD1730	NC-ISD1730	ISD-COB1730	ISD1730	• ISD-COB1730	• Demo Board for ISD1730	
NC-ISD1760	NC-ISD1760	ISD-COB1760	ISD1760	• ISD-COB1760	• Demo Board for ISD1760	
NC-ISD17150	NC-ISD17150	ISD-COB17150	ISD17150	• ISD-COB17150	• Demo Board for ISD17120	
NC-ISD17240	NC-ISD17240	ISD-COB17240	ISD17240	• ISD-COB17240	• Demo Board for ISD17240	
NC-ISD1810	NC-ISD1810	ISD-COB1810	ISD1806/10	• ISD-COB1810	• Demo Board for ISD1806/1810	
NC-ISD18B24	NC-ISD18B24	ISD-COB18B24	ISD18B12/24	• ISD-COB18B24	• Demo Board for ISD18B12/24	
NC-ISD18C10	NC-ISD18C10	ISD-COB18C10	ISD18C10	• ISD-COB18C10	• Demo Board for ISD18C06/18C10 (SPK/MIC sharing)	
NT-ISD1964	NT-ISD1964	ISD-DEMO1964	ISD1916/32/64 Class-D output	• ISD-DEMO1964	• Demo Board for 1964SYI	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NT-ISD1964A	NT-ISD1964A	ISD-DEMO1964_AUX	ISD1916/32/64 AUX output	• ISD-DEMO1964 AUX	• Demo Board for ISD1964SYI01	
NW-ISD2100S	NW-ISD2100S	ISD-ES2100_Mini_ PROG_S	ISD2115ASYI ISD2130SYI	• ISD-ES2100_Mini_ PROG_S	• ISD2100 SOP Single Socket Programmer • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NW-ISD2100Q	NW-ISD2100Q	ISD-ES2100_Mini_ PROG_Q	ISD2115AYYI ISD2130YYI	• ISD-ES2100_Mini_ PROG_Q	• ISD2100 QFN Single Socket Programmer • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NG-ISD2100S	NG-ISD2100S	ISD-2100_GANG_ Prog_S	ISD2115ASYI ISD2130SYI	• ISD-2100_GANG_ Prog_S	• ISD2100 SOP Standalone Gang Programmer	
NG-ISD2100Q	NG-ISD2100Q	ISD-2100_GANG_ Prog_Q	ISD2115AYYI ISD2130YYI	• ISD-2100_GANG_ Prog_Q	• ISD2100 QFN Standalone Gang Programmer	
NW-ISD2360S	NW-ISD2360S	ISD-ES2360_MINI_ PROG_S	ISD2360SYI	• ISD-ES2360_MINI_ PROG_S	• ISD2360 SOP Single Socket Programmer • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NW-ISD2360Q	NW-ISD2360Q	ISD-ES2360_MINI_ PROG_Q	ISD2360YYI	• ISD-ES2360_MINI_ PROG_Q	• ISD2360 QFN Single Socket Programmer • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NG-ISD2360S	NG-ISD2360S	ISD-2360_GANG_ PROG_S	ISD2360SYI	• ISD-2360_GANG_ PROG_S	• ISD2360 SOP Standalone Gang Programmer	
NG-ISD2360Q	NG-ISD2360Q	ISD-2360_GANG_ PROG_Q	ISD2360YYI	• ISD-2360_GANG_ PROG_Q	• ISD2360 QFN Standalone Gang Programmer	

Ordering No.	Part No.	Board Name	Supported Devices	Content	Description	Picture
NW-ISD15100	NW-ISD15100	ISD-ES15100_Mini_PROG	ISD15102FYI ISD15104FYI ISD15108FYI	• ISD-ES15100_Mini_PROG	• ISD15100 LQFP Single Socket Programmer • Connect to PC via ISD-ES_Mini_USB for programming and evaluation	
NW-ISDPROG	NW-ISDPROG	ISD-PROG	ISD2100 Series ISD15100 Series ISD15D00 Series	• ISD-PROG	• Digital ChipCorder Standalone Programmer • Support ISD2100/ISD15100/ISD15D00 Series	
NW-ISDIPROG1	NW-ISDIPROG1	ISD-IPROG-1	ISD4000 Series ISD5100 Series ISD1700 Series	• ISD-PROG-1	• Digital ChipCorder Single-Chip Programmer • Support ISD4000/ISD5100/ISD1700 Series	
NE-ISD1600	NE-ISD1600	ISD-ES1600_USB_PROG	ISD1600 Series	• ISD-ES1600_USB_PROG	• USB Evaluation Board for ISD1600 Series	
NW-P1700	NW-P1700	P1700	ISD1700 Series	• P1700	• Programmer Adapter of ISD-IPROG-1	
NE-ISD1700	NE-ISD1700	ISD-ES17XX_USB_PB	ISD1700 Series	• ISD-ES17XX_USB_PB	• USB Evaluation Board for ISD1700 Series	
NE-ISD1900	NE-ISD1900	ISD-ES1900_USB_PROG	ISD1900 Series	• ISD-ES1900_USB_PROG	• USB Evaluation Board for ISD1900 Series	

Development Tools for Audio Enhancement

Ordering No.	Part No.	BoardName	Supported Devices	Content	Description	Picture
NU-NAUSB2I2C	NU-NAUSB2I2C	USB-To-I2C/I2S_V1.1	NPCA120DD NPCA121DD NPCA120DY	• USB-To-I2C/I2S_V1.1	• USB-To-I2C/I2S_V1.1 Control Board for NPCA120/121 Demo Board	
NU-NPUSB2I2C	NU-NPUSB2I2C	USB-To-I2C/I2S	NPCA110X & NPCP215F	• USB-To-I2C/I2S	• USB-To-I2C/I2S Board for NPCA110X & NPCP215X	
NE-NPCA120	NE-NPCA120	EVB-NPCA120_V1.0	NPCA120DD	• EVB-NPCA120_V1.0	• NPCA120 Audio Enhancement, Bongiovi DPS, Standard Level Demo Board	
NE-NPCA121	NE-NPCA121	EVB-NPCA121_V1.0	NPCA121DD	• EVB-NPCA121_V1.0	• NPCA121 Audio Enhancement, Bongiovi DPS, Premium Level Demo Board	
NL-NPCA120	NL-NPCA120	DEMO-NPCA120-V2.0	NPCA120DD	• DEMO-NPCA120-V2.0	• NPCA120DD LQFP-64 Audio Enhancement, Bongiovi DPS, Standard Level Demo Board	
NL-NPCA121	NL-NPCA121	DEMO-NPCA121-V2.0	NPCA121DD	• DEMO-NPCA121-V2.0	• NPCA121DD LQFP-64 Audio Enhancement, Bongiovi DPS, Standard Level Demo Board	
NL-NPCA120DY	NL-NPCA120DY	DEMO-NPCA120_V3.0	NPCA120DY	• DEMO-NPCA120_V3.0	• NPCA120DY QFN-48 Audio Enhancement, Bongiovi DPS, Standard Level Demo Board	
NE-NPCA110XB	NE-NPCA110XB	NPCA110X-EVB	NPCA110X	• NPCA110X-EVB	• NPCA110X 1 Watt Base Board	
NT-NPCA110PP	NT-NPCA110PP	NPCA110P Piggy Board	NPCA110P	• NPCA110P Piggy Board	• NPCA110P Piggy Board	
NE-NPCP215F	NE-NPCP215F	NPCP215X-EVB	NPCP215F	• NPCP215X-EVB	• NPCP215F Demo Board	



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