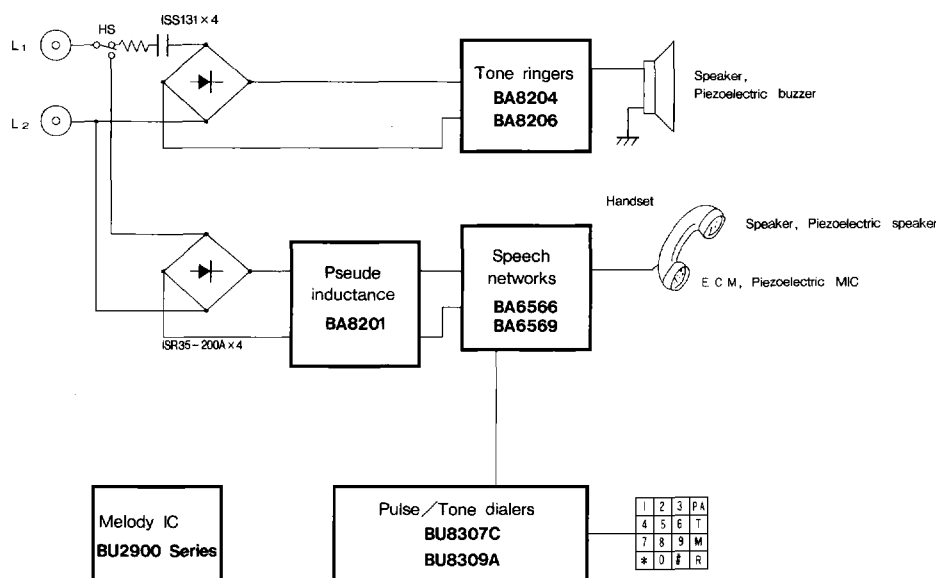


Phones

Block Diagram of Typical Applications



●Digital cordless telephone ADPCM transcoder

Part No.	Supply voltage range (V)	Function/Feature	Package
☆BU8710KS	3~5.5	4 channel ADPCM transcoder designed to '88 G721 recommendation. Space saver at digital telephone base station.	SQFP80

●Speech network

Part No.	Line current (mA)	Receiver	Microphone	Pad control	DTMF amp.	Key tone amp.	Loud speaker	Muting	Hold muting	Feature	Package
BA6566/F/FP	5~100	Dynamic / Ceramic	ECM / Dynamic	AGC	○	○		○		Wide range dynamic receiver RF radiation protection	DIP18/SOP18 / HSOP24
BA6567K	5~135	Ceramic		Pad			○	○	○	Built-in switching BN circuit	QFP44
BA6569FP/S	5~100	Dynamic / Ceramic		AGC Manual pad	○	○		○		Receiver pre amp. and power amp. are independent.	HSOP24/SDIP22
BA8215/L	2~100				○	○		○		Excellent branch characteristics. Complies with standard of U.S.A.	DIP14/ZIP16
BA8216	2~100				○	○		○		Receiver noise further reduced from the BA8215.	DIP14

●Tone ringer

Part No.	Adjustable starting current	Adjustable starting voltage	Withstand voltage (V)	Power-supply circuit with hysteresis	Feature		Remarks	Package
BA8204/F		○	40	○	High voltage	Low power consumption	Successor products of BA6564A/F	DIP8/SOP8
BA8205/F	○		40	○			Successor products of BA6565A/F	DIP8/SOP8
BA8206/F	○		40	○		Low power consumption	Successor products of BA6565A/F	DIP8/SOP8

●Pulse tone dialer

Part No.	Supply voltage range (V)	Pulse rate (PPS)	break ratio (%)	Redial memory digits	Hooking	Feature	Package
BU8307CS/CF	2.5~5.5	10/20	67/60	32	○	Complies with standards of Japan, USA, Canada, U.K., Korea, Taiwan, and Australia.	SDIP22/SOP24
New BU8309AS/AK	2.0~5.5	10/20	67/60	32	○	CPU interface Transmittable in power failures.	SDIP32/QFP32
New BU8325S/K	2.0~5.5	10/20	67/60	32	○	Complies with standards of Japan, USA, Canada, Korea, Taiwan, Australia. Supports CPU common BUS. Transmittable in power failures.	SDIP32/QFP32

●Pseude inductance

Part No.	Supply voltage range (V)	Features	Package
New BA8201/F	2~18	DC voltage is output from telephone line. High input impedance and low input/output voltage difference for easier power supply design.	DIP8/SOP8

Phone

●DTMF receiver

Part No.	Supply voltage range (V)	Interface	Dynamic range	Power down function	Oscillator	Features	Package
BU8871/F	4.75~5.25	Serial 3-wire	45dB		Crystal	Wide dynamic range	DIP8/SOP18
New BU8872/FS	4.5~5.5	Serial 3-wire	45dB		Crystal/Ceramic	Wide dynamic range	DIP8/SSOP-A16
BU8874/F	4.75~5.25	Serial 3-wire	45dB	○	Crystal	Wide dynamic range	DIP8/SOP18

●Tone decoder

Part No.	Supply voltage range (V)	Function / Feature	Package
BA1604/F	4.75~9	1ch PLL tone decoder.	DIP8/SOP8

●Cross point mixer

Part No.	Supply voltage range (V)	Cross point switch	Input buffer amp	Output mixer amp	Features	Package
BA8240F/FS	4.5~5.5	8×8	○	○	Suitable for voice signal changeover mixing of cordless answering phone.	SOP24/SSOP-A24
BU8241F/FS	2.7~5.5	8×8	○	○	Suitable for voice signal changeover mixing of cordless answering phone.	SOP24/SSOP-A24
New BU8242F	2.7~5.5	6×6	○	○	Power saving	SOP20
New BU8244F	2.7~5.5	4×4	○	○	Low noise	SOP16

●Panel interface

Part No.	Supply voltage range (V)	key	LED driver	Key scanning	Feature	Package
New BU8310AK	1.8~5.5	7×7	32	○	CPU interface	QFP64
New BU8311KS	1.8~5.5	7×7	24	○	Transmittable in power failures	SQFP56
New BU8313K	1.8~5.5	6×5	14	○	Serial data transfer	QFP44
☆BU8315F	2.0~5.5	—	14	—	With CPU interface, serial data transfer	SOP24

Melody IC

●For telephone

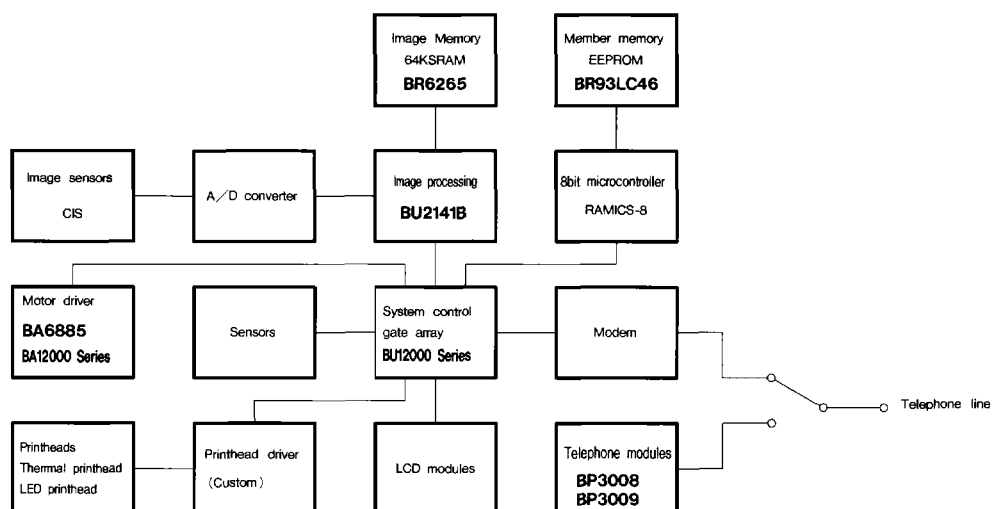
Part No.	Supply voltage range (V)	Stand-by function	On hook dial	Hook switch	Hold switch	Tone	Sound source	Music title	Package
BU2906F	2~4	○	○	○	○	Temperate	Unison	My heart is a Violin	SOP18
BU2907F	2~4	○	○	○	○	Temperate	Unison	There's no place like home	SOP18
BU2908/F	2~4	○	○	○	○	Temperate	Unison	Hey Jude Yesterday	DIP18/SOP18

●For door chime

Part No.	Supply voltage range (V)	Function / Feature	Package
BU2911	2~4	Two melodies. Six different chime sounds.Hold play and one shot play selectable.	DIP18
BU2913F	5	Eight different chime sounds. RC oscillation and ceramic oscillation. Suitable for door chime.	SOP18

FAX

Block Diagram of Typical Applications



●Image processing ASSP

Part No.	Supply voltage range (V)	Error distribution	Dithering	Simple binary	Image Sensor interface	A/D converter	Shading correction	γ Correction	Reduction	Remarks	Package
BU2130K1	5	6bit	32 graduations	○				○	optional		QFP80
New BU2140KS	5	6bit	64 graduations	○					optional	Expandable	SQFP100
BU2141BKS	5	5bit	32 graduations	○	○		○	○	selection		SQFP100
New BU2133KS	5	5bit	32 graduations	○	○		○	○	selection	Digital ABC	SQFP100
☆BU2134K	5	5bit	32 graduations	○	○	○(6bit)	○	○	optional		QFP64
☆BU2136KS	5	6bit	64 graduations	○	○	○(8bit)	○	○	optional		SQFP100

Note : 1.6-bit error distribution is equivalent of 64 tone halftone and 5-bit, 32-tone.

Communications equipment

●FM-IF system

Part No.	Supply voltage range (V)	IF	DET	OSC	Squeich	Center meter	AFC	Feature	Package
BA4112	4~8	○	○	○	○				DIP16
BA4113	4~9	○	○	○	○	○	○	Few external components.	DIP18
BA4114	1.8~7	○	○	○	○			Low voltage operation.	DIP16

●Microphone amplifier

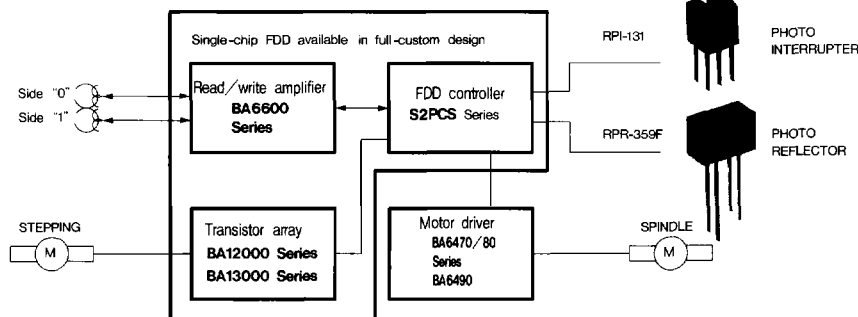
Part No.	Supply voltage range (V)	Function / Feature	Package
BA3414L	3.5~14	Microphone amplifier for FM communication equipment. Built-in transmit/receive switch. Pre-amplifier with limiter.	ZIP16

●FM intercommunication

Part No.	Supply voltage range (V)	PLL system	Squelch	Function / Feature	Package
BA1602L	6~10	○	○	Full duplex communication and press-to-talk system possible.	ZIP18

FDD

Block Diagram of Typical Applications



●Read/write amplifier

Part No.	Supply voltage range (V)	voltage to head	Power save	Filter	Writing current select	Feature		Package
BA6580DK	5	5/12			Inner/Outer track 2 stages	TDF type		QFP44
BA6587K	5	5	○		1M/2M 2 stages			QFP44
BA6589K	5	12	○		Inner/Outer track 2 stages			QFP44
BA6600K	5	5	○	Built-in	1M/1.6M/2M 3 stages	Level slice type		QFP44
BA6607K	5	5	○	Built-in	Inner/Outer track 2~4 stages			QFP32
New BA6608K	5	5	○	Built-in	1M/2M 2 stages	TDF type		QFP32
					Inner/Outer track 2~4 stages			
BA6610K	5	5	○	Built-in	1M/1.6M/2M 3 stages	TDF type	1MB, 1MB(F2), 1.6MB, 2MB(4Mode)	QFP32
					Inner/Outer track 2~4 stages			
New BA6612K	5	5	○	Built-in	1M/2M 2 stages	TDF type	1MB, 1.6MB, 2MB(3Mode)	QFP32
					Inner/Outer track 2~4 stages			
					1M/2M/4M 3 stages	TDF type	1MB, 1.6MB, 4MB(3Mode)	QFP32
					Inner/Outer track 2~4 stages			

●Controller

Part No.	Supply voltage range (V)	Function / Feature	Package
BU9500K	5	Includes all functions required for an FDD controller. 3.5", 5" and 8" versions.	QFP64

●Motor driver for spindle

Part No.	Supply voltage range (V)	Power dissipation Pd (mW)	Output current Io (A)	Stand-by circuit	Hole bias switch	digital servo	Index amplifier mono multivibrator	Clock frequency (KHz)	Rotation speed select pin (rpm)			Package
									L	M	H	
BA6465FP-Y	Control block 4.25~5.5 Output block 3.0~20.0	1450	1.3	L:start	○			—	—	—	—	HSOP25
BA6473FP-Y	4.25 ~ 6.5	1450	1.0	L:start	○	○		460.8	300	600	360	HSOP25
BA6474FP-Y	4.25 ~ 6.5	1450	1.0	L:start	○	○		491.52	300	—	360	HSOP25
BA6476AFP-Y	4.2 ~ 6.5	1450	1.0	L:start	○	○		1000.8	300	—	360	HSOP25
BA6479AFP-Y	4.2 ~ 6.5	1450	1.0	L:start	○	○		491.52	300	—	360	HSOP25
BA6485FP-Y	4.2 ~ 6.5	1450	1.0	H:start	○	○		1000.8	300	—	360	HSOP25
BA6487FP-Y	9.0 ~13.2	1450	1.0	H:start	○	○		1000.8	300	—	360	HSOP25
BA6488FP-Y	9.0 ~13.2	1450	1.0	L:start	○	○		1000.8	300	—	360	HSOP25
BA6490FS	4.2 ~ 6.5	600※	1.0	L:start	○	○	○	1000.8	300	—	360	SSOP-P32
BA6491FS	4.2 ~ 6.5	600※	1.0	L:start	○	○	○	1000.8	300	—	360	SSOP-P32
BA6493K	2.6 ~ 6.5	400※	1.0	H:start	○	—	Only index amplifier	—	—	—	—	QFP32
BA6494K	2.6 ~ 6.5	400※	1.0	H:start	○	○	○	1000.8	300	—	360	QFP32
BA6495K	2.6 ~ 6.5	400※	1.0	L:start	○	○	Only index amplifier	983	330	—	360	QFP32
BA6496K	2.6 ~ 6.5	400※	1.0	L:start	○	○	○	1000.8	330	—	360	QFP32
BA6497K	2.6 ~ 6.5	400※	1.0	L:start	○	○	Only index amplifier	1000.8	300	—	360	QFP32
New BA6498FS	2.6 ~ 6.5	600※	1.0	L:start	○	○	○	1000.8	300	—	360	SSOP-A32
BA6499K	2.6 ~ 6.5	400※	1.0	L:start	○	○	○	1000.8	300	—	360	QFP32

Notes : 1.The power dissipation data of BA6495K/BA6496K are measured in single unit.

●Spindle stepper motor driver

Part No.	Supply voltage range (V)	Function / Feature	Package
BA6480K	4.5~5.5	For 2*FDD. Holeless spindle motor driver and stepper are integrated on a single chip. Stand-by mode.	QFP44

●ODD

●Laser power controller

Part No.	Supply voltage range (V)	Function	Feature	Package
BH9610K	12	Laser power controller	High and low recording signal levels can be preset by the user. Includes an error detection circuit.	QFP44

●Spindle motor driver

Part No.	Supply voltage range (V)		Power dissipation (mW)	Output current (A)	digital servo	Stand-by circuit	Reverse brake	Switching accuracy of revolutions locking			Package
	Vcc	VM						L	M	H	
BA6850FP-Y	4.2~6.5	4.2~13.3	1450	1.0	○	L start	○	±0.5	±1.2	±2.5	HSOP25
BA6851FP-Y	4.2~6.5	4.2~13.3	1450	1.0	○	L start	○	±2.5	±3.75	±5.0	HSOP25

SCSI active terminator

Part No.	Supply voltage range (V)	Function / Feature	Package
New BH9590FP-Y	4.0~5.5	18 circuits, built-in constant current supply, compatible with SCSI- I and II	HSOP25

Special function

Part No.	Supply voltage range (V)	Function	Feature	Package
BA7042	5	VCO with sensitivity adjustment	Center frequency can externally be set. Sensitivity to control frequency can be set by external constant (Built-in sensitivity control amp.) .	DIP8