

Product Guide



Creative Design For Semiconductors

Automotive

Power Management

LED Lighting & Display Driver

Interface

Analog & Mixed Signal

Standard Logic

SEMICONDUCTOR PRODUCTS 2013

IC Design & Manufacture

- Automotive
- Power Management
- LED Lighting & Display Driver
- Interface
- Analog & Mixed Signal
- Standard Logic





건실한 국내 제조기반을 바탕으로
 확실한 품질과 경쟁력 있는 가격
 안정된 납기를 이미 실현하고 있습니다

Automotive

- Automotive Motor Driver
- Automotive Digital Clock
- Automotive LDO
- Automotive Communication
- Automotive ICs

Power Management

- Ground Fault Interrupters
- Motor Controller
- PWM & SMPS Controller
- Power Factor Controller
- Transistor Array ICs
- Charger ICs
- Transistor
- IGBT Gate Driver
- DC-DC Converter
- Voltage Regulator
 - Low Dropout Voltage Regulators
 - Positive Voltage Regulators
 - Adjustable Voltage Regulators
 - Switching Voltage Regulators
- Precision Low Voltage Reference
- Voltage Detector
- Reset ICs
- Reset ICs (Reference Data)

LED Lighting & Display Driver

- LED/LCD Display
- LED Lighting
- VFD Drivers

Interface

- RS-232
- RS-485
- Isolator
- Transmitters & Receivers
- UART

Analog & Mixed Signal

- Fire Detector
- Telephone ICs
 - Telephone One-Chip Solution
 - Pulse and Tone/Pulse Dialers
 - Speaker Intergrated Circuits
 - Tone Telephone Ringers
- Operational Amplifier & Comparator
 - Operational Amplifiers
 - Comparators
- ICs for Audio Systems
- Timers
- Real Time Clock ICs
- Melody ICs

Standard Logic

- IW4000B Series
- IN74HCXXXX Series
- IN74HCTXXX Series
- IN74XXX Series
- IN74LSXXX Series

LED Lighting & Display Driver LED

반도체설계 전문회사의 집약된 노하우로
 밝은 LED세상을 열어 드립니다

- Analog & Mixed Signal 반도체설계의 전문기술 축적은
- 전력용 반도체는 물론, 녹색산업 및 LED 솔루션분야
- Customixed IC 개발로 이어지고 있습니다.
- 이러한 자신감을 바탕으로 LED IC 라인업을 구축하여
- 100% 국산화, 나아가 세계화를 통해 LED솔루션의
- 선구자적 자세로 밝은 LED세상을 열어 가겠습니다.

Table of Contents

Automotive	5
Automotive Motor Driver	5
Automotive Digital Clock	5
Automotive LDO	5
Automotive Communication	5
Automotive ICs	6
Power Management	7
Ground Fault Interrupters	7
Motor Controller	7
PWM & SMPS Controller	7
Power Factor Controller	7
Transistor Array ICs	8
Chager ICs	8
Transistor	8
IGBT Gate Driver	8
DC - DC Converter	8
Voltage Regulator	9
Low Dropout Voltage Regulators	9
Positive Voltage Regulators	9
Adjustable Voltage Regulators	9
Switching Voltage Regulators	10
Precision Low Voltage Reference	10
Voltage Detector	10
Reset ICs	11
Reset ICs (Reference Data)	11
LED Lighting & Display Driver	12
LED/LCD Display	12
LED Lighting	12
VFD Drivers	12
Interface	13
RS-232	13
RS-485	13
Isolator	13
Transmitters & Receivers	13
UART	14

Table of Contents

Analog & Mixed Signal	15
Fire Detector.....	15
Telephone ICs.....	15
Telephone One-Chip Solution	15
Pulse and Tone/Pulse Dialers	15
Speaker Intergrated Circuits	15
Tone Telephone Ringers	15
Operational Amplifier & Comparator	16
Operational Amplifiers	16
Comparators	16
ICs for Audio Systems	17
Timers	18
Real Time Clock ICs	18
Melody ICs	18
Standard Logic	19
IW4000B Series	19
IN74HCXXX Series	21
IN74HCTXXX Series	23
IN74XXX Series	24
IN74LSXXX Series	24

Automotive Motor Driver

Part	Pin to Pin Compatibility	Function	Package
NEW IK8508D/PD*	TDA3629	Head Lamp Leveling Driver	ESOP-8, PDSOP-14
NEW IK8509D	OWN	Power Folding	SOP-8

* Under Development

Automotive Digital Clock

Part	Pin to Pin Compatibility	Function	Package
IN7100N/MQ	S5G5127B (KS5127B)	CMOS Automotive Digital Clock Circuit (DUTY : 1, 1/4, 1/8, 1/16)	DIP-40, MQFP-44
NEW IK6213TQ*	OWN	Digital Clock for LCD Driver	TQFP-48

* Under Development

Automotive LDO

Part	Pin to Pin Compatibility	Function	Package
ILE4264GET ILE4264-2GET	TLE4264G TLE4264-2G	Low-Drop Voltage Regulator 5V; 100mA; Reverse Polarity Protection (AEC Q100 Qualified)	SOT223
ILE4278D	TLE4278	Low-Drop Fixed Voltage Regulator 5V/150mA (AEC Q100 Qualified)	PDSOP-14
ILE4275D2T/D0T	TLE4275	Low Dropout Voltage Regulator (5V/400mA)	TO-263-5, TO-252-5
ILE4276D2T/D0T	TLE4276	Low Dropout Voltage Regulator (5V,8.5V,12V,ADJ/400mA)	TO-263-5, TO-252-5
ILE4270D2T	TLE4270G/S	Low-Drop Voltage Regulator 5V; 550mA; Reverse Polarity Protection	TO-263-5

Automotive Communication

Part	Pin to Pin Compatibility	Function	Package
IL33290D	MC33290	ISO K Line Serial Link Interface	SOP-8
ILA82C251D*	PCA82C251	CAN Transceiver for 24V Systems	SOP-8
NEW IK8301D	TJA10XX	CAN Transceiver for 12V Systems	SOP-14
NEW IK8302D	TJA10XX	LIN Transceiver for 12V Systems	SOP-8

* Under Development

Automotive ICs

Part	Pin to Pin Compatibility	Function	Package
IL33091AN/AD	MC33091A	High-Side TMOS Driver	DIP-8, SOP-8
IL33193N/D	MC33193	Automotive Direction indicator RS=20mW , Fn=2.2, Duty Cycle (Normal Operation) 45 55%, Duty Cycle (One 21 W Lamp Defect) 35 45%, Defect Lamp Detector Threshold 42.5 56, RSS=220W	DIP-8, SOP-8
NEW IL33193-03N/D	U643B	Automotive Direction indicator RS=30mW, Fn=2.5, Duty Cycle (Normal Operation) 4555%, Duty Cycle (One 21 W Lamp Defect) 3545%, Defect Lamp Detector Threshold 7595, RSS=220 W, Short Circuit Detector Threshold	DIP-8, SOP-8
IL33197AN/AD	MC33197A	Automotive Wash Wiper Timer Output Clamp Voltage ($I_{out}=20\text{Ma}$) 18 22V, Internally incorporated Zener diode 30V	DIP-8, SOP-8
IL1055D		Two-channel ignition controller	SOP-16
IL8190N	CS8190ENF16	Precision Air-Core Tach/Speedo Driver with Return to Zero	DIP-16
IL1815N/D	LM1815	Adaptive Variable Reluctance Sensor Amplifier	DIP-14, SOP-14
IN9014N		For light control relay IC	DIP-8
NEW IK8001	OWN	Alternator Regulator with RVC Protocol	Chip & Other PKG
NEW IK8002TQ	OWN	Smart-MOS High Side (10A) with MCU	TQFP-48

Ground Fault Interrupter

Part	Pin to Pin Compatibility	Function	Package
IL7101N/D	GL7101, KA2803	Ground Fault Interrupters Earth Leakage Current Detector	DIP-8, SOP-8
IK7102N/D	Own	Ground Fault Interrupters Earth Leakage Current Detector	DIP-8, SOP-8
NEW IK7104N/D*	Own	EMI Enhanced Ground Fault Interrupters	DIP-8, SOP-8
IL54123N/D	M54123	Ground Fault Interrupters Earth Leakage Current Detector	DIP-8, SOP-8
IL4145AN/AD	RV4145A	Low Power Ground Fault Interrupters	DIP-8, SOP-8

* Under Development

Motor Controller

Part	Pin to Pin Compatibility	Function	Package
IL33035N/DW	MC33035	Brushless DC Motor Controller	DIP-24, SOP-24
NEW IK6501SD*	TB6551	3-Phase Full-Wave Sine-Wave PWM Brushless Motor Controller	SSOP-24
IL33091AN/AD	MC33091A	High-Side T MOS Driver	DIP-8, SOP-8
NEW IK8508D/PD*	TDA3629	Head Lamp Leveling Driver	ESOP-8, PDSO-14
NEW IK8509D	OWN	Power Folding for Side Mirror	ESOP-8
NEW IK6019AD	OWN	High-Voltage High-Current Stepper Motor Driver	SOP-16

* Under Development

PWM & SMPS Controller

Part	Pin to Pin Compatibility	Function	Package
IL494N/D IL494AN/AD	GL494, KA7500	Pulse-Width-Modulation Control Circuit	DIP-16, SOP-16
IL3842N/D	UC3842	Current Mode PWM Controller	DIP-8, SOP-8
IL3843N/D	UC3843	Current Mode PWM Controller	DIP-8, SOP-8
NEW IK3466*	Own	AC/DC Converter with built in Power DMOS	DIP-7
IL6083N	U6083B	PWM Control with Interference-Suppression	DIP-8
IL44608N	MC44608	SMPS Controller	DIP-8

* Under Development

Power Factor Controller

Part	Pin to Pin Compatibility	Function	Package
IL34262N/D	MC34262	Power Factor Controller	DIP-8, SOP-8
ILA3354N	TFA3354	IC for Electronic Ballasts	DIP-8
NEW IK6562	L6562	Power Factor Controller	SOP-8

Power Management

Transistor Array ICs

Part	Pin to Pin Compatibility	Function	Package
ILN2003AN/AD ILN2004N/D	ULN2003A/04A TD62003A/04A	High-Voltage High-Current Darlington Transistor Arrays	DIP-16, SOP-16
IK62083N/DW IK62084N/DW	ULN2803/04 TD62083/84	8 CH Darlington Sink Driver	DIP-18, SOP-18
IK62783N/D IK62784N/D	TD62783/84	8 CH High-Voltage Source Driver	DIP-18, SOP-18

Charger ICs

Part	Pin to Pin Compatibility	Function	Package
IK3051S2T	TSM1051	Constant Voltage & Constant Current Controller For Battery Chargers and Adaptors (Vcc 2.5~12V, Vref 1%)	SOT-23-6
IK3051AS2T	TSM1051A	Constant Voltage & Constant Current Controller For Battery Chargers and Adaptors (Vcc 2.5~12V, Vref 0.5%)	SOT-23-6
IK3052S2T	TSM1052	Constant Voltage & Constant Current Controller For Battery Chargers and Adaptors (Vcc 2.5~18V, Vref 1%)	SOT-23-6
IK3052AS2T	TSM1052A	Constant Voltage & Constant Current Controller For Battery Chargers and Adaptors (Vcc 2.5~18V, Vref 0.5%)	SOT-23-6
NEW IK3134QF	OWN	LDO with OVP for Battery Charger	QFN (3*3)

Transistor

Part	Pin to Pin Compatibility	Function	Package
SL1001ET/PT	B772	Audio Frequency Power Amplifier (PNP)	SOT-223, SOT-89
SL1002ET/PT	D882	Audio Frequency Power Amplifier (NPN)	SOT-223, SOT-89

IGBT Gate Driver

Part	Pin to Pin Compatibility	Function	Package
IL33153N/D	MC33153P	Single IGBT Gate Driver	DIP-8, SOP-8

DC/DC Converter

Part	Pin to Pin Compatibility	Function	Package
IL34063AN/AD	MC34063	DC-to-DC Converter	DIP-8, SOP-8
IK1509-XXDT	AP1509-XX	2A PWM Buck DC/DC Converter (150KHz)	SOP-8
IK5302D	Own	3A DC-DC Switching Voltage Regulator (Fixed 1MHz)	ESOP-8
NEW IK5304D	Own	6A DC-DC Switching Voltage Regulator	QFN-24

Low Dropout Voltage Regulators

Part	Pin to Pin Compatibility	Output Voltage, V	Output Current, A	Output Voltage Tolerance, %	Tested Operating Junction Temp. Range, °C	Package
IL1117-XX ET/D0T/PT	AMS1117	1.2, 1.25(adj), 1.5, 1.8, 2.5, 2.85, 3.3, 5.0	1.0	±2	Tj=-40...125	SOT-223, TO-252, SOT-89
IL233-XXPT/ET	OWN	1.25 (adj), 1.5, 1.8, 2.5, 2.85, 3.3, 5.0	0.5	±2	Tj=-40...125	SOT-89, SOT-223
NEW IL5219	Micrel Device	ADJ,1.5,1.8, 2.5,3.3,5.0	1.0	±2	Tj=-20...125	SOT-23-5, SOP-8
NEW IL1950	FAN1950	2.5	1.5	±2.5	Tj=-40...125	TO-252-3L/5L
NEW IL1951	FAN1951	1.8	1.5	±2.5	Tj=-40...125	TO-252-3L/5L
IL2931-XX	LM2931Z-X	3.3, 5, 9	0.1	±5	Tj=-40...125	TO-92, SOT-223
IL1084-XXD2T	LT1084	1.25 (adj), 1.8, 3.3, 5.0	5.0	±2	Tj=-40...125	TO-263
IL1085-XXD2T	LT1085	1.2,1.25(adj), 1.5, 1.8, 2.5, 2.85, 3.3, 3.6, 5.0	3.0	±2	Tj=-40...125	TO-263
IK1589D0T/D2T	FAN1589	1.2	2.7	±2	Tj=-10...125	TO-252, TO-263
IL3480-XXLF/PT	LM3480	3.3, 5.0	0.1	±5	Tj=-40...125	TO-92, SOT-89

Positive Voltage Regulators

Part	Pin to Pin Compatibility	Output Voltage, V	Output Current, A	Output Voltage Tolerance, %	Tested Operating Junction Temp. Range, °C	Package
IL78XX	MC78XX	5, 6, 8, 9, 10, 12, 15, 18, 24	1.0	±5	Ta=-40...125	Chip Sale
IL78LXXLF/PT/DT	MC78LXX	5, 6, 8, 9, 10, 12, 15, 18, 24	0.1	±5	Ta=-40...125	TO-92, SOT-89, SOP-8

Adjustable Voltage Regulators

Part	Pin to Pin Compatibility	Function	Package
IL317D0T/D2T	LM317	Adjustable Output Positive Voltage Regulator (1.5A)	TO-252, TO-263
IL317L-LF/ET/PT	LM317L	Adjustable Output Positive Voltage Regulator (100mA)	TO-92, SOT-223/89

Switching Voltage Regulators

Part	Pin to Pin Compatibility	Output Voltage, V	Output Current, A	Output Voltage Tolerance, %	Tested Operating Junction Temp. Range, °C	Package
IL2576-XX KB/D2T	LM2576-XX	3.3, 5.0, 12, 15, ADJ	3.0	4	Ta=-40...125	TO-220-5L, TO-263-5L
IL2596-XX KB/D2T	LM2596 XX	3.3, 5.0, 12, ADJ	3.0	4	Ta=-40...125	TO-220-5L, TO-263-5L
IK1509-XXDT	AP1509-XX	3.3, 5.0, 12, ADJ	2.0	3	Ta=-40...125	SOP-8

Precision Low Voltage Reference

Part	Pin to Pin Compatibility	Function	Package
TL431Z-LF/ST/PT/DT	TL431	Programmable precision references	TO-92, SOT-23 SOT-89, SOP-8
TL432LF/LS	TL432	Programmable precision references	TO-92

Voltage Detector

Part	Pin to Pin Compatibility	Detecting Voltage, V	Input Voltage, V	Output Current, A	Detecting Voltage Tolerance, %	Tested Operating Junction Temp. Range, °C	Package
IL75XXLF/ ST/PT	HT70xx	2.2, 2.4, 2.55, 2.7, 2.8, 3.3, 3.9, 4.2, 4.7, 5.0	1.2~5.5	0.03	2.0	Ta=-10...70	TO-92, SOT-23, SOT-89
IL70XXLF/ PT	KIA70xx	2.1, 2.3, 2.7, 2.9, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.9, 4.2, 4.5	-0.3~15	0.02	2.0	Ta=-10...70	TO-92, SOT-89

Reset ICs

Part	Pin to Pin Compatibility	Function	Package
IN1232N/D	DS1232	Low Power Micro Monitor Chip	DIP-8, SOP-8
IN1705N/D, IN1705RN/RD	DS1705	Micro Monitor (RN,RD Push-Pull Reset Output)	DIP-8, SOP-8
IN1706N/D, IN1706SRN/SRD	DS1706S	Micro Monitor (SRN, SRD Push-Pull Reset Output)	DIP-8, SOP-8
IN1708N/D	DS1708	Micro Monitor Chip	DIP-8, SOP-8
IL809LST/IL810LST IL809MST/IL810MST IL809TST/IL810TST IL809SST/IL810SST IL809RST/IL810RST	STM809/810LW STM809/810MW STM809/810TW STM809/810SW STM809/810RW	Reset Circuit	SOT-23-5

Reset ICs (Reference Data)

Parameter	IN1232N IN1232D	IN1705N IN1705D	IN1705RN IN1705RD	IN1706N IN1706D	IN1706RN IN1706RD	IN1708N IN1708D	IL809L	IL809M	IL809T	IL809S	IL809R
Supply Voltage, V	4.5~5.5	1.2~5.5	1.2~5.5	1.2~5.5	1.2~5.5	1.2~5.5	1.2~5.5				
Nominal Reset Threshold, V	4.37	4.65	4.65	2.93	2.93	4.40	4.63	4.38	3.08	2.93	2.63
Min Reset Pulse Width, ms	250	100	100	130	130	130	140				
Push-Pull RESET Output	L, H	L	H	L	H	L, H	L, H				
Watchdog	•	•	•	•	•						
Nominal Watchdog Timeout Period (s), if available	0.15	1.6	1.6	1.6	1.6		-				
Separate Watchdog Output		•	•	•	•						
Power-Fail Comparator/ Reset Input		•	•	•	•	•					
Manual-Reset Input	•	•	•	•	•	•					
Supply Current in Operating Mode, uA, max (typ)	2000 (500)	350 (100)	350 (100)	50	50	50	15 (7)				
Operating Temperature, C	-10 ~ +70		-40 ~ +85				-40 ~ +85				
Package	DIP-8 SOP-8	DIP-8 SOP-8	DIP-8 SOP-8	DIP-8 SOP-8	DIP-8 SOP-8	DIP-8 SOP-8	SOT-23-5				

LED Light & Display Driver

LED/LCD Display

Part	Pin to Pin Compatibility	Function	Package
IK2102DW	Own	LED Driver with Key Scan Function, (Common Cathode Type) 4 digits x13 segments to 7 digits x 10 segments	SOP-28
IK2103TSD	Own	LED Display Driver 4~7 Digits 6~9 Segments 1x6 Key Scan	TSSOP-20
IK2107DW	Own	LED Display Driver IC (12/9 segment output, 7 to 4 grid output)	SOP-24
IK2108DW	Own	LED Display Driver (Common Anode Type) 8 Columns x 14 Rows to 12 Columns x 10 Rows	SOP-32
NEW IK6207TQ	Own	LED Display Driver with Touch Switch (Common Cathode Type) 4 digits x 13 segments or 7 digits x 10 segments	TQFP-48
NEW IK6208LQ/TQ	Own	LED Display Driver (Common Anode Type) Platform Base IK6208LQ : 8 digits x 8 segments (2 Key Scan / 2CH PWM) IK6208TQ : 8 digits x 14 segments (3 Key Scan / 2CH PWM)	LQFP-32 TQFP-48
IK6486N/PL/MQ	GM6486	33 Output LED Driver	DIP-40, PLCC-44 MQFP-44
KL7107N	ICL7107	3 1/2- Digit LED Display, A/D Converters	DIP-40
NEW IK6213TQ*	OWN	LCD Driver with MCU Function Inside	TQFP-48

* Under Development

LED Lighting

Part	Pin to Pin Compatibility	Function	Package
IK2802D	MBI1802	Constant-Current LED Driver (2ch)	SOP-8
IK2804D	MBI1804	Constant-Current LED Driver (4ch)	SOP-8
IK2816TSD	MBI1816	Constant-Current LED Driver (16ch)	TSSOP-20
IL9910D	HV9910	Universal High Brightness LED Driver	SOP-8
IL9921/22/23	HV9921/22/23	3-PIN Switch-Mode LED Lamp Driver ICs With Build-in MOSFET	TO-92, SOT-89
NEW IK2306PT	OWN	60mA Switch-Mode LED Driver IC	SOT-89
NEW IK2312ET*	OWN	120mA Switch-Mode LED Driver IC	SOT-223
NEW IK3004	OWN	22mA Current Limit IC	SOT-23-5
IL1937	LT1937	White LED Step-Up Converter	SOT-25, SC70
NEW IL7150D0T*	AMC7150	Power LED Driver, 1.5A	TO-252-5L
NEW IL7150AD0T*	AMC7150	Power LED Driver, 0.8A	TO-252-5L

* Under Development

VFD Drivers




Part	Pin to Pin Compatibility	Function	Package
IN7100N/MQ	S5G5127B (KS5127B)	CMOS Automotive Digital Clock Circuit (DUTY : 1, 1/4, 1/8, 1/16)	DIP-40 MQFP-44

RS-232

Part	Pin to Pin Compatibility	Function	Package
IN75232N/DW	CD75232	RS-232-D Interface 1 Chip IC	DIP-20,SOP-20
ILX232N/D	MAX232	Drivers/Receiver (RS-232) (2/2) (Vcc = 5V)	DIP-16, SOP-16
ILX3232N/D/TSD	MAX3232	Drivers/Receiver (RS-232) (2/2) (Vcc = 3.3 to 5.5V)	DIP-16, SOP-16, TSSOP-16
ILX3221EN/ED	MAX3221E	15kV ESD -Protected, 1A, 3.0V to 5.5V, 250kbps, RS -232 Transceivers with Auto-Shutdown	DIP-16, SOP-16
ILX3226N/D/TSD*	MAX3226	1A Supply Current, 3.0V to 5.5V, 1Mbps RS -232 Transceivers with Auto-Shutdown Plus	DIP-16, SOP-16, TSSOP-16

* Under Development

RS-485

Part	Pin to Pin Compatibility	Function	Package
ILX485N/D	MAX485	Drivers/Receiver (RS-485) - 5.0V	DIP-8, SOP-8
ILX3485N/D	MAX3485	Drivers/Receiver (RS-485) - 3.3V	DIP-8, SOP-8
 ILX75176N/D	SN75176	Drivers/Receiver (RS-485) - 5.0V	DIP-8, SOP-8
 ILX3085N/D	MAX3085E	Drivers/Receiver (RS-485) - 5.0V	DIP-8, SOP-8
 ILX3075N/D	MAX3075E	Drivers/Receiver (RS-485) - 3.3V	DIP-8, SOP-8

Isolator

Part	Pin to Pin Compatibility	Function	Package
 ILX488-3D	OWN	Low-Power Triple-Channel Digital Isolator	SOP-16

Transmitters & Receivers

Part	Pin to Pin Compatibility	Function	Package
IN1488N/D	MC1488D	4-Channel Transmitter for Serial Interface	DIP-14,SOP-14
IN1489AN/AD	MC1489ADM	4-Channel Receiver for Serial Interface	DIP-14,SOP-14
INS82C50AN/D	INS82C50A	Microcontroller for Serial Interface	DIP-40
IN82C55AN/BN	82C55A	Programmable Peripheral Interface	DIP-40
INF8574AN/AD	PCF8574	Remote 8-Bit I/O Expander for I2C-Bus	DIP-16, SOP-16

UART

Part	Pin to Pin Compatibility	Function	Package
IN16C554PL-TQ64/PL68/TQ80	TL16C554	Enhanced Quadruple Version of the 16C550 UART (Universal Asynchronous Receiver Transmitter) Operating Voltage 5.0V Clock Frequency 16MHz Operating Temperature 0 ~ 70 °C	64-TQFP 68-PLCC 80-TQFP
IN16C554A-TQ64/PL68/TQ80	TL16C554	Enhanced Quadruple Version of the 16C550 UART (Universal Asynchronous Receiver Transmitter) Operating Voltage 3.3V Clock Frequency 16MHz Operating Temperature 0 ~ 70 °C	64-TQFP 68-PLCC 80-TQFP
IN16C1054-TQ64/PL68/TQ80		Quad UART with 256-byte TX/RX FIFO Operating Voltage 3.3V Data rate up to 5Mbps Clock Frequency up to 80MHz	64-TQFP 68-PLCC 80-TQFP
IN16C1058-TQ		Octal-UART Controller with 256-Byte FIFO (8 Port)	128-TQFP

Fire Detector

Part	Pin to Pin Compatibility	Function	Package
NEW IK7001A	Own	Optical Smoke Detector with voice	LQFP-32
NEW IK7002	Own	OP AMP for Fire Detector	SC70-5
NEW IK7005	Own	Digital-analog IC for detection the rising temperature before the fire situation	SOP-8

Telephone One-Chip Solution

Part	Pin to Pin Compatibility	Function	Package
IL2533AN/ADW	AS2533	Multi-Standard CMOS Singl Chip Telephone IC with Dual Soft Clipping	DIP-28, SOP-28

Pulse and Tone/Pulse Dialers

Part	Pin to Pin Compatibility	Function	Package
IL91214AN/AD	UMS91214	Tone/Pulse Dialer with Flash Function	DIP-16, SOP-16 DIP-18, SOP-18

Speaker Integrated Circuits

Part	Pin to Pin Compatibility	Function	Package
KL34018N/DW	MC34018	Voice Switched Speakerphone Circuit	DIP-28, SOP-28
IL34118N/DW	MC34118 U4082	Voice Switched Speakerphone Circuit	DIP-28, SOP-28
IL34119N/D	MC34119 U4083	Telephone Audio Amplifier	DIP-8, SOP-8
IL5009N/D	DBL5009	Speaker Amplifier	DIP-8, SOP-8
ILA1062N/D ILA1062AN/AD	TEA1062 TEA1062A	Low Voltage Transmission Circuit with Dialer Interface	DIP-16, SOP-16
IL6965N/D	GL6965	Telephone Speech Network with Dialer Interface	DIP-20, SOP-20

Tone Telephone Ringers

Part	Pin to Pin Compatibility	Function	Package
IL2411N/D	KA2411	Two-Tone Telephone Ringer	DIP-8, SOP-8
IL2418N/D	KA2418 L1240	Two-Tone Telephone Ringer with Diode Bridge	DIP-8, SOP-8
IL6840N/D	GL6840A GL6840B	Two-Tone Telephone Ringer with Diode Bridge	DIP-8, SOP-8

Analog & Mixed Signal

Operational Amplifiers

Part	Pin to Pin Compatibility	Function	Package
Dual OP Amp			
IL358N/D IL2904N/D	LM358 LM2904	Dual Operational Amplifier	DIP-8, SOP-8
IL4558N/D	LM4558	Dual Operational Amplifier	DIP-8, SOP-8
IL1458N/D	NJM1458	Dual General Purpose Operational amplifier	DIP-8, SOP-8
IL4560N/D	NJM4560	Dual Operational Amplifier	DIP-8, SOP-8
IL4580N/D	NJM4580, LM833	Dual Operational Amplifier	DIP-8, SOP-8
KL103N/D	TSM103	Dual Operational Amplifier and Voltage Reference	DIP-8, SOP-8
Quad OP Amp			
IL324N/D IL2902N/D	LM324 LM2902	Quad Operational Amplifier	DIP-14, SOP-14
Programmable Operational Amplifier			
IL1776CN/CAN IL1776CD/CAD	MC1776C	Micro-power Programmable Operational Amplifier CAN, CAD ($T_A = -40^{\circ} \div +85^{\circ}C$)	DIP-8, SOP-8
Precision Operational Amplifier			
IL9002N/D	OP-07A	Precision Operational Amplifier	DIP-8, SOP-8
IL9002AN/D	OP-07	Precision Operational Amplifier	DIP-8, SOP-8

Comparators

Part	Pin to Pin Compatibility	Function	Package
Dual Comparator			
IL393N/D IL2903N/D	LM393 LM2903	Dual Comparator	DIP-8, SOP-8
Quad Comparator			
IL339N/D IL2901N/D	LM339 LM2901	Quad Comparator	DIP-14, SOP-14

Analog & Mixed Signal

ICs for Audio Systems

IC's Class	Part	Pin to Pin Compatibility	Supply Voltage, V	Power, W	Gain, dB	Load Resistance, Ohm	Package
Low Power	IL34119N/ D <i>Mono</i>	MC34119N	2...16	0.25	80	8; 16; 32	DIP-8, SOP-8
	IL386N/ D <i>Mono</i>	LM386	4.0...12.0	1.0	26 ... 42	8.0 (4.0; 16)	DIP-8, SOP-8
	ILA7050N <i>Mono/Stereo BTL</i>	TDA7050	1.6...6.0	1x0.140 2x0.075	32 (mono) 26 (stereo)	32 (16; 64)	DIP-8
	ILA7052N <i>Mono</i>	TDA7052	3.0...18.0	1.2	38 ... 40	8.0	DIP-8
	ILA7053N <i>Stereo BTL</i>	TDA7053	3.0...18.0	2x1.0	38 ... 40	8.0 (16; 25)	DIP-16
	KL7496LN <i>Stereo BTL with DC Control</i>	TDA7496L	10.0...18.0	2x2.0	30	8.0	DIP-20
Middle Power	ILA7056 <i>Mono</i>	TDA7056	3.0...18.0	3	39 ... 42	16.0	SOT110-1
	ILA7056B <i>Mono with DC Control</i>	TDA7056B	4.5...18.0	5.0	39.5...41.5	16.0	SOT 110-1
Large Power	ILA1519B, B1,B1Q <i>Mono/Stereo</i>	TDA1519B	6.0...18.0	12 (mono) 2x6 (stereo)	45...47 (mono) 39...41 (stereo)	4.0 8.0	SIL-9P (SOT110-1, (SOT131-2, SOT157-2)


Part	Pin to Pin Compatibility	Function	Package
KL6270N/D	SL6270	Audio amplifier and Voice operated Gain adjusting device(VOGAD)	DIP-8, SOP-8
KL3340N/D	MC3340	Electronic Attenuator : DC operated Volume Control	DIP-8, SOP-8
KL2822MN/D	TDA2822M	Dual Low Voltage Power Amplifier Mono/Stereo Audio Amplifier	DIP-8, SOP-8
IL5009N/D	DBL5009	Speaker Amplifier	DIP-8, SOP-8
IK7437Q	TDA7437	Digitally Controlled Audio Processor 4 Speaker Attenuator	QFP-44

Analog & Mixed Signal

Timers

Part	Pin to Pin Compatibility	Function	Package
INA8583N	PCF8583P	Clock Calendar with 256x8 Bit Static RAM with I ² C Bus	DIP-8
ILC555N/D	GLC555	Timer	DIP-8, SOP-8
ILC556N/D	GLC556	Dual Timer	DIP-14, SOP-14

Real Time Clock ICs

Part	Pin to Pin Compatibility	Function	Package
IN1307N/D	DS1307	64x8, Serial, IC Real -Time Clock	DIP-8, SOP-8
 IN1363N/D	PCF8563, DS1208	Real-time clock/calendar with X-tal	DIP-8, SOP-8
IN141618N	MC141618	Real Time Clock Plus RAM	DIP-24

Melody ICs

Part (Pin to Pin Compatibility)	Maximum Number of Tunes (Number of Notes)	V _{DD} , V	I _{DD} , μ A In Mode of		Package
			Tune Play	Stop	
BT8028/LF/N	16(64)	1.3(3.3)	60	0.5	Bare chip TO-92, DIP-8
BT8031/LF/N	2(127)	1.3(3.3)	1	0.5	Bare chip TO-92, DIP-8

Part	Pin to Pin Compatibility	Function	Features	Package
BT8040N	BXA4240	Melody IC	Two Sound Source with Envelope (CR envelope) Maximum four Sound Source 3~5V operating voltage Can Drive an 8ohm Dynamic Loudspeaker if provided Externally with a transistor	DIP-16

IW4000B Series

CMOS

Part	Pin to Pin Compatibility	Function	Package
IW4001BN/BD	CD4001BN/BD	Quad 2-Input NOR Gate	DIP-14, SOP-14
IW4002BN/BD	CD4002BN/BD	Dual 4-Input NOR Gate	DIP-14, SOP-14
IW4006BN/BD	CD4006BN/BD	18-Bit Static Shift Register	DIP-14, SOP-14
IW4008BN/BD	CD4008BN/BD	4-Bit Full Adder	DIP-16, SOP-16
IW4011BN/BD	CD4011BN/BD	Quad 2-Input NAND Gate	DIP-14, SOP-14
IW4012BN/BD	CD4012BN/BD	Dual 4-Input NAND Gate	DIP-14, SOP-14
IW4013BN/BD	CD4013BN/BD	Dual D-Type Flip-Flop	DIP-14, SOP-14
IW4015BN/BD	CD4015BN/BD	Dual 4-Bit Static Shift Register	DIP-16, SOP-16
IW4016BN/BD	CD4016BN/BD	Quad Bilateral Switch	DIP-14, SOP-14
IW4017BN/BD	CD4017BN/BD	Decade Counter/Driver	DIP-16, SOP-16
IW4018BN/BD	CD4018BN/BD	Presetable Divide-by-N Counter	DIP-16, SOP-16
IW4019BN/BD	CD4019BN/BD	Quad AND-OR Gate	DIP-16, SOP-16
IW4020BN/BD	CD4020BN/BD	14-Bit Binary Divide Counter	DIP-16, SOP-16
IW4021BN/BD	CD4021BN/BD	8-Bit Shift Register	DIP-16, SOP-16
IW4022BN/BD	CD4022BN/BD	Divide-by-8 Counter/Divider	DIP-16, SOP-16
IW4023BN/BD	CD4023BN/BD	Triple 3-Input NAND Gate	DIP-14, SOP-14
IW4024BN, BD	CD4024BN, BD	Stage Ripple-Carry Binary Counter/.Divider	DIP-14, SOP-14
IW4025BN/BD	CD4025BN/BD	Triple 3-Input NOR Gate	DIP-14, SOP-14
IW4027BN/BD	CD4027BN/BD	Dual J-K Flip-Flop	DIP-16, SOP-16
IW4028BN/BD	CD4028BN/BD	BCD-to-Decimal Decoder	DIP-16, SOP-16
IW4029BN/BD	CD4029BN/BD	Binary or BCD-Decade Counter	DIP-16, SOP-16
IW4030BN/BD	CD4030BN/BD	Quad Exclusive-OR Gate	DIP-14, SOP-14
IW4034BN/BDW	CD4034BN/BD	8-Bit Shift Register	DIP-24, SOP-24
IW4035BN/BD	CD4035BN/BD	4-Bit Parallel-In/Parallel-Out Shift Register	DIP-16, SOP-16
IW4040BN/BD	CD4040BN/BD	12-Bit Binary Counter	DIP-16, SOP-16
IW4042BN/BD	CD4042BN/BD	Quad Clocked D-Latch	DIP-16, SOP-16
IW4043BN/BD	CD4043BN/BD	Quad NOR R-S Latch (3-State)	DIP-16, SOP-16
IW4049BN/BD	CD4049BN/BD	Hex Buffer/Converter	DIP-16, SOP-16
IW4050BN/BD	CD4050BN/BD	Hex Buffer/Converter	DIP-16, SOP-16
IW4051BN/BD	CD4051BN/BD	8-Channel Analog Multiplexer/Demultiplexer	DIP-16, SOP-16
IW4052BN/BD	CD4052BN/BD	Dual 4-Channel Analog Multiplexer/Demultiplexer	DIP-16, SOP-16
IW4053BN/BD	CD4053BN/BD	Triple 2-Channel Analog Multiplexer/Demultiplexer	DIP-16, SOP-16
IW4059BN/BDW	CD4059BN/BD	Programmable Counter	DIP-24, SOP-24
IW4060BN/BD	CD4060BN/BD	14-Bit Binary Divide/ Counter	DIP-16, SOP-16
IW4066BN/BD	CD4066BN/BD	Quad Bilateral Switch	DIP-14, SOP-14
IW4068BN/BD	CD4068BN/BD	8-Input NAND Gate	DIP-14, SOP-14
IW4069UBN/UBD	CD4069UBN/UBD	Hex Inverter	DIP-14, SOP-14
IW4070BN/BD	CD4070BN/BD	Quad Exclusive-OR Gate	DIP-14, SOP-14
IW4071BN/BD	CD4071BN/BD	Quad 2-Input OR Gate	DIP-14, SOP-14
IW4072BN/BD	CD4072BN/BD	Dual 4-Input OR Gate	DIP-14, SOP-14
IW4073BN/BD	CD4073BN/BD	Triple 3-Input AND Gate	DIP-14, SOP-14
IW4075BN/BD	CD4075BN/BD	Triple 3-Input OR Gate	DIP-14, SOP-14
IW4077BN/BD	CD4077BN/BD	Quad Exclusive-NOR Gate	DIP-14, SOP-14
IW4081BN/BD	CD4081BN/BD	Quad 2-Input AND Gate	DIP-14, SOP-14
IW4093BN/BD	CD4093BN/BD	Quad 2-Input NAND Schmitt Trigger	DIP-14, SOP-14
IW4098BN/BD	CD4098BN/BD	Dual Monostable Multivibrator	DIP-16, SOP-16
IW40107BN/BD	CD40107BN/BD	Dual 2-Input NAND Buffer/Driver	DIP-14, SOP-14
IW4502BN/BD	CD4502BN/BD	Hex Inverter/Buffer	DIP-16, SOP-16

IW4000B Series (continue)

CMOS

Part	Pin to Pin Compatibility	Function	Package
IW4503BN/BD	CD4503BN/BD	Hex Buffer	DIP-16, SOP-16
IW4511BN/BD	CD4511BN/BD	BCD-to-7-Segment Latch Decoder/Driver	DIP-16, SOP-16
IW4516BN/BD	CD4516BN/BD	Pre-settable Binary Up/Down Counter	DIP-16, SOP-16
IW4518BN/BD	CD4518BN/BD	Dual BCD Up Counter	DIP-16, SOP-16
IW4519BN/BD	CD4519BN/BD	Quad AND/OR Select Gate	DIP-16, SOP-16
IW4520BN/BD	CD4520BN/BD	Dual Binary Up Counter	DIP-16, SOP-16
IW4528BN/BD	CD4528BN/BD	Dual Monostable Multivibrator	DIP-16, SOP-16
IW4531BN/BD	NEF4531BN/BD	12-Bit Checker Tree	DIP-16, SOP-16
IW4541BN/BD	CD4541BN/BD	Programmable Timer	DIP-14, SOP-14
IW4543BN/BD	CD4543BN/BD	BCD-to-7-Segment Latch/Decoder/Driver for Liquid-Crystal Display	DIP-16, SOP-16
IW4585BN/BD	CD4585BN/BD	4-Bit Comparator	DIP-16, SOP-16

IN74HCXXXX Series

CMOS

Part	Pin to Pin Compatibility	Function	Package
IN74HC00AN/AD	MC74HC00AN/AD	Quad 2-Input NAND Gate	DIP-14, SOP-14
IN74HC02AN/AD	MC74HC02AN/AD	Quad 2-Input NOR Gate	DIP-14, SOP-14
IN74HC03AN/AD	MC74HC03AN/AD	Quad 2-Input NAND Gate, OC	DIP-14, SOP-14
IN74HC04AN/AD	MC74HC04AN/AD	Hex Inverter	DIP-14, SOP-14
IN74HC04AN/AD	own	Unbuffered Hex inverter	DIP-14, SOP-14
IN74HC05AN/AD	SN74HC05AN/AD	Hex Inverter, OC	DIP-14, SOP-14
IN74HC08AN/AD	MC74HC08AN/AD	Quad 2-Input AND Gate	DIP-14, SOP-14
IN74HC10AN/AD	MC74HC10AN/AD	Triple 3-Input NAND Gate	DIP-14, SOP-14
IN74HC11AN/AD	MC74HC11AN/AD	Triple 3-Input AND Gate	DIP-14, SOP-14
IN74HC14AN/AD	MC74HC14AN/AD	Hex Schmitt-Trigger Inverter	DIP-14, SOP-14
IN74HC20AN/AD	MC74HC20AN/AD	Dual 4-Input NAND Gate	DIP-14, SOP-14
IN74HC21AN/AD	MC74HC21AN/AD	Dual 4-Input Positive-AND Gate	DIP-14, SOP-14
IN74HC22AN/AD	MC74HC22AN/AD	Dual 4-Input Positive-NAND Gate, OC	DIP-14, SOP-14
IN74HC27AN/AD	MC74HC27AN/AD	Triple 3-Input Positive-NOR Gate	DIP-14, SOP-14
IN74HC30AN/AD	MC74HC30AN/AD	8-Input Positive-NAND Gate	DIP-14, SOP-14
IN74HC32AN/AD	MC74HC32AN/AD	Quad 2-Input OR Gate	DIP-14, SOP-14
IN74HC74AN/AD	MC74HC74AN/AD	Dual D-Type Flip-Flop	DIP-14, SOP-14
IN74HC75AN/AD	MC74HC75AN/AD	Quad Bistable Latch	DIP-16, SOP-16
IN74HC85AN/AD	MC74HC85AN/AD	4-Bit Magnitude Comparator	DIP-16, SOP-16
IN74HC86AN/AD	MC74HC86AN/AD	Quad 2-Input Exclusive-OR Gate	DIP-14, SOP-14
IN74HC109AN/AD	MC74HC109AN/AD	Dual J-K Positive-Edge-Triggered Flip-Flop	DIP-16, SOP-16
IN74HC112AN/AD	MC74HC112AN/AD	Dual J-K Negative-Edge-Triggered Flip-Flop	DIP-16, SOP-16
IN74HC123AN/AD	MC74HC123AN/AD	Dual Monostable Multivibrator with Reset	DIP-16, SOP-16
IN74HC125AN/AD	MC74HC125AN/AD	Quad 3-State Buffer	DIP-14, SOP-14
IN74HC132AN/AD	MC74HC132AN/AD	Quad 2-Input NAND Schmitt-Trigger Inverter	DIP-14, SOP-14
IN74HC138AN/AD	MC74HC138AN/AD	3-8 Decoder/Demultiplexer	DIP-16, SOP-16
IN74HC139AN/AD	MC74HC139AN/AD	Dual 2-4 Decoder/Demultiplexer	DIP-16, SOP-16
IN74HC151AN/AD	MC74HC151AN/AD	8-1 Data Selector/Multiplexer	DIP-16, SOP-16
IN74HC153AN/AD	MC74HC153AN/AD	Dual 4-1 Data Selector/Multiplexer	DIP-16, SOP-16
IN74HC154AN/ADW	MC74HC154AN/ADW	4-16 Decoder/Demultiplexer (3-State)	DIP-24, SOP-24
IN74HC155AN/AD	MM74HC155AN/AD	Dual 2-4 Decoder/Demultiplexer	DIP-16, SOP-16
IN74HC157AN/AD	MC74HC157AN/AD	Quad 2-1 Data Selector/Multiplexer	DIP-16, SOP-16
IN74HC158AN/AD	MC74HC158AN/AD	Quad 2-1 Data Selector/Multiplexer, INV	DIP-16, SOP-16
IN74HC161AN/AD	MC74HC161AN/AD	4-Bit Synchronous Binary Counter, Asynchronous Reset	DIP-16, SOP-16
IN74HC163AN/AD	MC74HC163AN/AD	4-Bit Synchronous Binary Counter, Synchronous Reset	DIP-16, SOP-16
IN74HC164AN/AD	MC74HC164AN/AD	8-Bit Serial-In Parallel-Out Shift Register	DIP-14, SOP-14
IN74HC165AN/AD	MC74HC165AN/AD	8-Bit Parallel-in Serial-Out Shift Register	DIP-16, SOP-16
IN74HC166AN/AD	CD74HC166AN/AD	8-Bit Parallel-in Serial-Out Shift Register	DIP-16, SOP-16
IN74HC174AN/AD	MC74HC174AN/AD	Hex D-Type Flip-Flop	DIP-16, SOP-16
IN74HC175AN/AD	MC74HC175AN/AD	Quad D-Type Flip-Flop	DIP-16, SOP-16
IN74HC192AN/AD	CD74HC192AN/AD	Synchronous Decade Up/Down Counter	DIP-16, SOP-16
IN74HC193AN/AD	CD74HC193AN/AD	4-Bit Synchronous Binary Up/Down Counter	DIP-16, SOP-16
IN74HC221AN/AD	CD74HC221AN/AD	Dual Monostable Multivibrator with Reset	DIP-16, SOP-16
IN74HC240AN/ADW	MC74HC240AN/ADW	Octal Buffer/Line Driver, INV (3-State)	DIP-20, SOP-20
IN74HC241AN/ADW	MC74HC241AN/ADW	Octal Buffer/Line Driver, NINV (3-State)	DIP-20, SOP-20

IN74HCXXX Series (continued)

CMOS

Part	Pin to Pin Compatibility	Function	Package
IN74HC244AN/ADW	MC74HC244AN/AD	Octal Buffer/Line Driver NINV (3-State)	DIP-20, SOP-20
IN74HC245AN/ADW	MC74HC245AN/AD	Octal Bus Transceiver, NINV (3-State)	DIP-20, SOP-20
IN74HC251AN/AD	MC74HC251AN/AD	8-I Data Selector/Multiplexer (3-State)	DIP-16, SOP-16
IN74HC253AN/AD	MC74HC253AN/AD	Dual 4-1 Data Selector/Multiplexer, NINV (3-State)	DIP-16, SOP-16
IN74HC257AN/AD	MC74HC257AN/AD	Quad 2-1 Data Selector/Multiplexer, NINV (3-State)	DIP-16, SOP-16
IN74HC258AN/AD	CD74HC258AN/AD	Quad 2-1 Data Selector/Multiplexer, INV (3-State)	DIP-16, SOP-16
IN74HC273AN/ADW	MC74HC273AN/AD	Octal D-Type Flip-Flop	DIP-20, SOP-20
IN74HC279AN/AD	MC74HC279AN/AD	Quad Set/Reset Latch	DIP-16, SOP-16
IN74HC283AN/AD	CD74HC283AN/AD	4-Bit Full Adder	DIP-16, SOP-16
IN74HC299AN/ADW	MC74HC299AN/AD	8-Bit Universal Shift/Storage Register (3-State)	DIP-20, SOP-20
IN74HC323AN/ADW	MC74HC323AN/AD	8-Bit Universal Shift/Storage Register (3-State)	DIP-20, SOP-20
IN74HC365AN/AD	MC74HC365AN/AD	Hex Buffer/Line Driver (3-State)	DIP-16, SOP-16
IN74HC367AN/AD	MC74HC367AN/AD	Hex Buffer/Line Driver (3-State)	DIP-16, SOP-16
IN74HC373AN/ADW	MC74HC373AN/AD	Octal D-Type Latch (3-State)	DIP-20, SOP-20
IN74HC374AN/ADW	MC74HC374AN/AD	Octal D-Type Flip-Flop (3-State)	DIP-20, SOP-20
IN74HC393AN/AD	MC74HC393AN/AD	Dual 4-Bit Binary Counter	DIP-14, SOP-14
IN74HC533AN/ADW	MC74HC533AN/AD	Octal D-Type Latch, INV (3-State)	DIP-20, SOP-20
IN74HC534AN/ADW	MC74HC534AN/AD	Octal D-Type Flip-Flop, NINV (3-State)	DIP-20, SOP-20
IN74HC573AN/ADW	MC74HC573AN/AD	Octal Transparent Latch (3-State)	DIP-20, SOP-20
IN74HC574AN/ADW	MC74HC574AN/AD	Octal D-Type Flip-Flop, NINV (3-State)	DIP-20, SOP-20
IN74HC595AN/AD	MC74HC595AN/AD	8-Bit Shift Register with Output Latch	DIP-16, SOP-16
IN74HC597AN/AD	MC74HC597AN/AD	8-Bit Shift Register with Input Latch	DIP-16, SOP-16
IN74HC620AN/ADW	SN74HC620AN/AD	Octal Bidirectional Bus Transceiver, INV	DIP-20, SOP-20
IN74HC623AN/ADW	SN74HC623AN/AD	Octal Bidirectional Bus Transceiver, NINV	DIP-20, SOP-20
IN74HC640AN/ADW	MC74HC640AN/AD	Octal Bus Transceiver (3-State)	DIP-20, SOP-20
IN74HC651AN/ADW	CD74HC651AN/AD	Octal Bus Transceiver/Register (3-State)	DIP-24, SOP-24
IN74HC652AN/ADW	CD74HC652AN/AD	Octal Bus Transceiver/Register, NINV (3-State)	DIP-24, SOP-24
IN74HC874AN/ADW	own	Dual 4-Bit D-Type Flip Flop	DIP-24, SOP-24
IN74HC4015AN/AD	MC74HC4015AN/AD	Dual 4-Bit Static Shift Register	DIP-16, SOP-16
IN74HC4046AN/AD	MC74HC4046AN/AD	Phase-Locked Loop	DIP-16, SOP-16
IN74HC4051AN/ADW	MC74HC4051AN/AD	8-Channel Analog Multiplexer/Demultiplexer	DIP-16, SOP-16
IN74HC4052AN/ADW	MC74HC4052AN/AD	Dual 4-Channel Analog Multiplexer/Demultiplexer	DIP-16, SOP-16
IN74HC4053AN/ADW	MC74HC4053AN/AD	Triple 2-Channel Analog Multiplexer/Demultiplexer	DIP-16, SOP-16
IN74HC4060AN/ADW	SN74HC4060AN/ADW	14-Stage Asynchronous Binary Counters and Oscillators	DIP-16, SOP-16
IN74HC4094AN/AD	CD74HC4094AN/AD	8-Bit Shift and Bus Register	DIP-16, SOP-16

IN74HCTXXX Series

CMOS

Part	Pin to Pin Compatibility	Function	Package
IN74HCT00AN/AD	MC74HCT00AN/AD	Quad 2-Input NAND Gate	DIP-14, SOP-14
IN74HCT02AN/AD	MC74HCT02AN/AD	Quad 2-Input NOR Gate	DIP-14, SOP-14
IN74HCT04AN/AD	MC74HCT04AN/AD	Hex Inverter	DIP-14, SOP-14
IN74HCT08AN/AD	MC74HCT08AN/AD	Quad 2-Input AND Gate	DIP-14, SOP-14
IN74HCT10AN/AD	MC74HCT10AN/AD	Triple 3-Input NAND Gate	DIP-14, SOP-14
IN74HCT14AN/AD	MC74HCT14AN/AD	Hex Schmitt-Trigger Inverter	DIP-14, SOP-14
IN74HCT20AN/AD	MC74HCT20AN/AD	Dual 4-Input NAND Gate	DIP-14, SOP-14
IN74HCT21AN/AD	MC74HCT21AN/AD	Dual 4-Input Positive-AND Gate	DIP-14, SOP-14
IN74HCT22AN/AD	MC74HCT22AN/AD	Dual 4-Input Positive-NAND Gate, OC	DIP-14, SOP-14
IN74HCT27AN/AD	MC74HCT27AN/AD	Triple 3-Input Positive-NOR Gate	DIP-14, SOP-14
IN74HCT30AN/AD	MC74HCT30AN/AD	8-Input Positive-NAND Gate	DIP-14, SOP-14
IN74HCT32AN/AD	MC74HCT32AN/AD	Quad 2-Input OR Gate	DIP-14, SOP-14
IN74HCT74AN/AD	MC74HCT74AN/AD	Dual D-Type Flip-Flop	DIP-14, SOP-14
IN74HCT85AN/AD	MC74HCT85AN/AD	4-Bit Magnitude Comparator	DIP-16, SOP-16
IN74HCT86AN/AD	MC74HCT86AN/AD	Quad 2-Input Exclusive-OR Gate	DIP-14, SOP-14
IN74HCT109AN/AD	MC74HCT109AN/AD	Dual J-K Positive-Edge-Triggered Flip-Flop	DIP-16, SOP-16
IN74HCT125AN/AD	MC74HCT125AN/AD	Quad 3-State Buffer	DIP-14, SOP-14
IN74HCT126AN/AD	MC74HCT126AN/AD	Quad 3-State Buffer	DIP-14, SOP-14
IN74HCT132AN/AD	MC74HCT132AN/AD	Quad 2-Input NAND Schmitt-Trigger Inverter	DIP-14, SOP-14
IN74HCT138AN/AD	MC74HCT138AN/AD	3-8 Decoder/Demultiplexer	DIP-16, SOP-16
IN74HCT139AN/AD	MC74HCT139AN/AD	Dual 2-4 Decoder/Demultiplexer	DIP-16, SOP-16
IN74HCT151AN/AD	MC74HCT151AN/AD	8-1 Data Selector/Multiplexer	DIP-16, SOP-16
IN74HCT153AN/AD	MC74HCT153AN/AD	Dual 4-1 Data Selector/Multiplexer	DIP-16, SOP-16
IN74HCT155AN/AD	MM74HCT155AN/AD	Dual 2-4 Decoder/Demultiplexer	DIP-16, SOP-16
IN74HCT157AN/AD	MC74HCT157AN/AD	Quad 2-1 Data Selector/Multiplexer	DIP-16, SOP-16
IN74HCT163AN/AD	MC74HCT163AN/AD	4-Bit Synchronous Binary Counter, Synchronous Reset	DIP-16, SOP-16
IN74HCT164AN/AD	MC74HCT164AN/AD	8-Bit Serial-in Parallel-Out Shift Register	DIP-14, SOP-14
IN74HCT165AN/AD	MC74HCT165AN/AD	8-Bit Parallel-in Serial-Out Shift Register	DIP-16, SOP-16
IN74HCT174AN/AD	MC74HCT174AN/AD	Hex D-Type Flip-Flop	DIP-16, SOP-16
IN74HCT240AN/ADW	MC74HCT240AN/AD	Octal Buffer/Line Driver, INV (3-State)	DIP-20, SOP-20
IN74HCT241AN/ADW	MC74HCT241AN/AD	Octal Buffer/Line Driver, NINV (3-State)	DIP-20, SOP-20
IN74HCT244AN/ADW	MC74HCT244AN/AD	Octal Buffer/Line Driver NINV (3-State)	DIP-20, SOP-20
IN74HCT245AN/ADW	MC74HCT245AN/AD	Octal Bus Transceiver, NINV (3-State)	DIP-20, SOP-20
IN74HCT251AN/AD	MC74HCT251AN/AD	8-1 Data Selector/Multiplexer, INV (3-State)	DIP-16, SOP-16
IN74HCT273AN/ADW	MC74HCT273AN/AD	Octal D-Type Flip-Flop	DIP-20, SOP-20
IN74HCT279AN/AD	MC74HCT279AN/AD	Quad Set/Reset Latch	DIP-16, SOP-16
IN74HCT283AN/AD	CD74HCT283AN/AD	4-Bit Adder	DIP-16, SOP-16
IN74HCT299AN/AD	MC74HCT299AN/AD	8-Bit Universal Shift/Storage Register (3-State)	DIP-20, SOP-20
IN74HCT323AN/AD	MC74HCT323AN/AD	8-Bit Universal Shift/Storage Register (3-State)	DIP-20, SOP-20
IN74HCT373AN/ADW	MC74HCT373AN/AD	Octal D-Type Latch (3-State)	DIP-20, SOP-20
IN74HCT374AN/ADW	MC74HCT374AN/AD	Octal D-Type Flip-Flop (3-State)	DIP-20, SOP-20
IN74HCT573AN/ADW	MC74HCT573AN/AD	Octal Transparent Latch (3-State)	DIP-20, SOP-20
IN74HCT574AN/ADW	MC74HCT574AN/AD	Octal D-Type Flip-Flop, NINV (3-State)	DIP-20, SOP-20
IN74HCT620AN/DW	SN74HCT620AN/D	Octal Bidirectional Bus Transceiver, INV	DIP-20, SOP-20
IN74HCT623AN/DW	own	Octal Bidirectional Bus Transceiver, NINV	DIP-20, SOP-20
IN74HCT640AN/ADW	own	Octal Bus Transceiver (3-State)	DIP-20, SOP-20
IN74HCT874AN/ADW	MC74HCT874AN/AD	Dual 4-Bit D-Type Flip-Flop	DIP-24, SOP-24

Standard Logic

IN74XXX Series

TTL

Part	Pin to Pin Compatibility	Function	Package
IN7406N/D	SN7406N/D	Hex Inverter/Buffer with High-Voltage Output, OC	DIP-14, SOP-14
IN7407N/D	SN7407N/D	Hex Buffer with High Voltage Output, OC	DIP-14, SOP-14

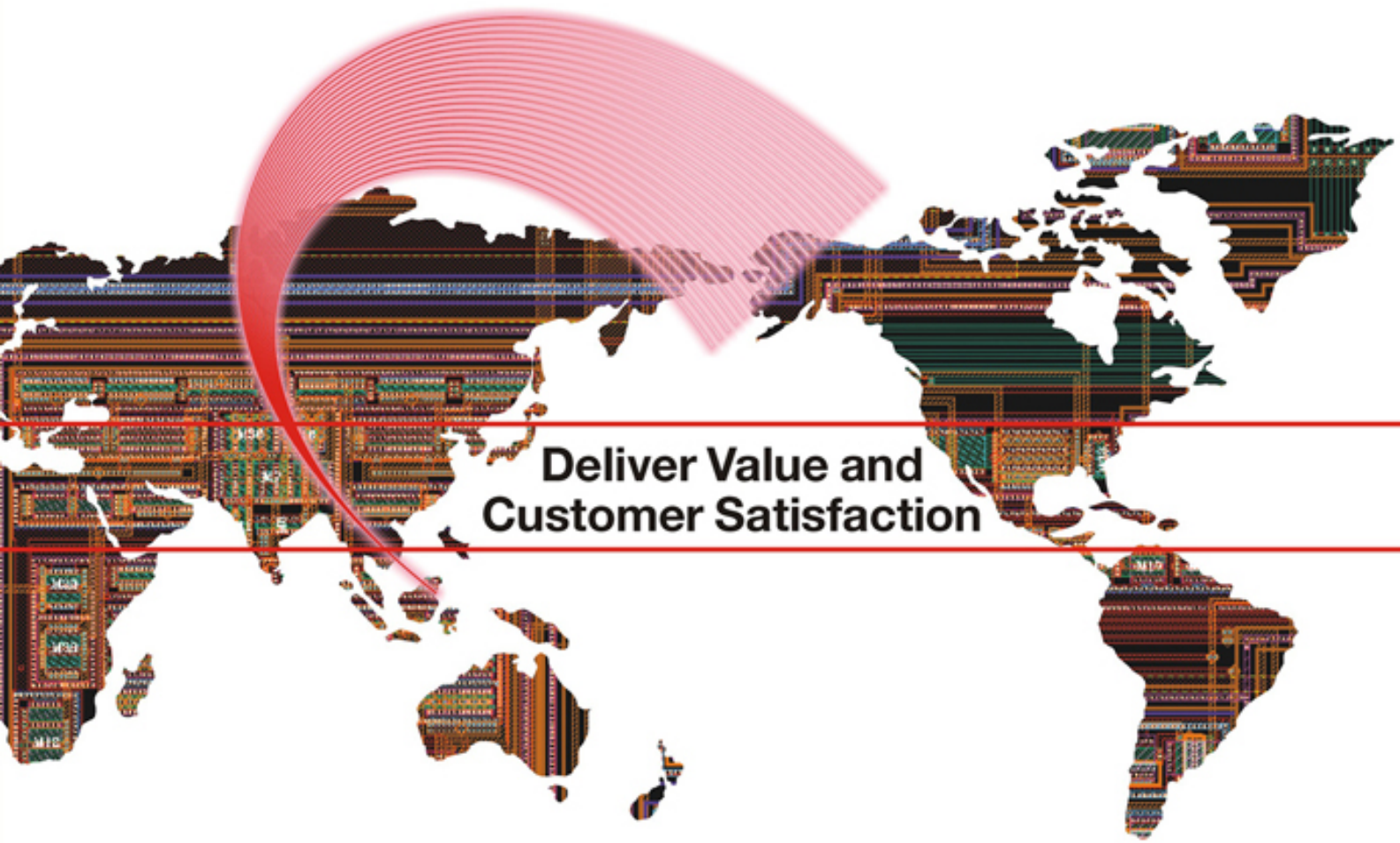
IN74LSXXX Series

LS

Part	Pin to Pin Compatibility	Function	Package
IN74LS04N/D	own	Hex Inverter	
IN74LS05N/D	CD74LS05N/D	Hex Inverter, OC	DIP-14, SOP-14
IN74LS06N/D	CD74LS06N/D	Hex Inverter/Buffer with High-Voltage Output, OC	DIP-14, SOP-14
IN74LS07N/D	CD74LS07N/D	Hex Buffer with High-Voltage Output, OC, 30 V	DIP-14, SOP-14
IN74LS14N/D	CD74LS14N/D	Hex Schmitt-Trigger Inverter	DIP-14, SOP-14
IN74LS86N/D	CD74LS86N/D	Quad 2-Input Exclusive-OR Gate	DIP-14, SOP-14
IN74LS138N/D	CD74LS138N/D	3-8 Decoder/Demultiplexer	DIP-16, SOP-16
IN74LS157N/D	CD74LS157N/D	Quad 2-1 Data Selector/Multiplexer	DIP-16, SOP-16
IN74LS161AN/AD	CD74LS161AN/AD	4-Bit Binary Counter	DIP-16, SOP-16
IN74LS164N/D	CD74LS164N/D	8-Bit Parallel-Out Shift Register	DIP-14, SOP-14
IN74LS244N/DW	CD74LS244ND,W	Octal Buffer/Line Driver, NINV (3-State)	DIP-20, SOP-20
IN74LS245N/DW	CD74LS245N/DW	Octal Bus Transceiver, NINV (3-State)	DIP-20, SOP-20



IC 미래를 향한
IKsemicon의 힘찬 항해는
계속되고 있습니다



**Deliver Value and
Customer Satisfaction**



HEAD OFFICE / R&D Lab.

503ho, DMCHi-Tech Industrial Center, 330
SeongAm-ro, Mapo-gu, Seoul 121-912 S.KOREA
TEL : 82-2-3153-7090~4 FAX : 82-2-3153-7095