

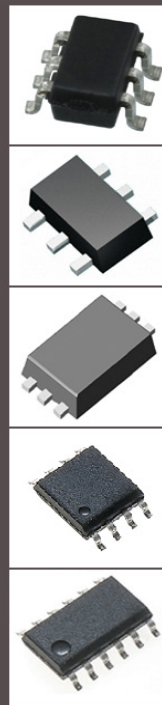
SMD-codes

DATABOOK

SMD-codes.

6 and more pin cases active SMD semiconductor components marking codes.

- 77.000 semiconductor components SMD-codes:
- Diodes, Transistors, Integrated circuits
- Case pin assignment
- Pinout
- Marking style
- Schematic diagram
- Additional SMD info
- Case drawings
- Manufacturers



2024-2025 EDITION



<http://www.turuta.md>

ELECTRONICS COMPONENTS

Eugeniu Turuta Martin Turuta

**SMD-codes.
6 and more pin cases
active SMD semiconductor components
marking codes.**

DATABOOK

Chisinau, Toronto, 2024-2025
<http://www.turuta.md>



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Introduction

At earlier eighties began a trend to replace a traditional through-hole technique with the surface mounted technology (SMT) using surface mounted devices (SMD). The SMT, although intended in principle for automatic manufacturing only expand more and more, even into a hobby world. This trend will continue, because many new components are available in SMD versions only. The SMT technique opens advantages and new applications through miniaturising of the components and increasing of reliability. The industry standard unfortunately allows that most of the SMD components does not have a clear description. Since a tiny size of the components, they are labelled with one, two or more character or graphic SMD code. Thus it is necessary to take into account that the colour and (or) placing of alphanumeric or graphic symbols are also important. Therefore a sure identification of the components is impossible without appropriate technical documentation. Moreover the polarity and pin - outs of different components could be not identified without data sheets.

Identifying the manufacturers type number of an SMD device from the package code can be a difficult task. Unfortunately, each device code is not necessarily unique.

For various manufacturers it is possible to place different devices in the same case with the same SMD-code. For example, with a **6H** SMD-code in a SOT-23 case might be either a npn-transistor **BC818** (CDIL) or a capacitance-diode **FMMV2104** (Zetex) or a n-channel jFET transistor **MMBF5486** (Motorola) or a npn-digital transistor **MUN2131** (Motorola) or a npn-digital transistor **UN2117** (Panasonic) or a CMOS-integrated circuit- voltage detector with reset output **R3131N36EA** (Ricoh). Even the same manufacturer may use the same code for different devices.

To identify a particular SMD device, is necessary to identify the manufacturer, package type and note the SMD code printed on the device.

The identification of the manufacturer is possible only if on the case are printed the manufacturer's logos, but it not always happens. Besides, sometimes, it is possible to determine the manufacturer with indirect tags. Many recent ON Semiconductor devices have a small superscript letter after the device code, such as **SA^c** (this smaller letter is merely a month of manufacture code). Infineon devices usually have a lower case '**s**' (**ATs**, **LOs**). NXP (Philips) devices usually have a lower case '**p**' (**AHp**, **Z1p**, **pB0**) or '**-**' (**DQ-**, **-ZS**) for the devices made in Hong Kong, '**t**' (**tT9**, **Y7t**) for the devices made in Malaysia, "**W**" (**WT9**, **Y7W**) for the devices made in China. In section 19 are submitted the logos of the SMD devices manufacturers.

The package type is another problem for the identification of SMD devices. The different manufacturers can designate identical cases concerning by the various standards (or concerning by the internal system). Besides, the various cases can have an identical kind (form) and differ only by sizes. This distinction of sizes so it is not enough, that can be is measured only by special measuring devices.

Compliance with the name and type of cases from different manufacturers is solved by applying in the column "Case" an equivalent type name for equivalent cases.

In addition to SMD-code, upper case may be put padding alpha-numeric information (usually by another font or size of characters, also may be by other arrangement). Relationship position of the SMD-code and padding information have defined as style and show in the column "Style"

In the following tables sections the SMD semiconductor components - irrelevant as to whether it is dealing with transistors, diodes, integrated circuits etc. are placed in separate tables according to numbers of terminals and (or) type of cases and are listed in alpha-numeric order by SMD-codes.

Column 1 ("SMD-Code")

Column 2 ("Type")

The type designations correspond to those of the respective manufacturer documentations.

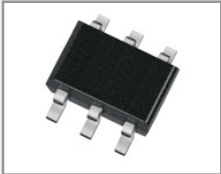
Column 3 ("Function")

Short definition of the semiconductor component.

Used abbreviations:

BM-IC	Battery Management integrated circuit	LDR-IC	LED driver integrated circuit
BR	Bridge Rectifier	Lin-IC	Linear integrated circuit
C-diode	Capacitance diode (varactor, varicap)	LVR-IC	Linear voltage regulator integrated circuit
CMOS-Log	CMOS logic integrated circuit	LVR/Vdet-IC	Linear voltage regulator/Voltage detector combined integrated circuit
Comp-IC	Voltage comparator integrated circuit	MMIC	Monolithic Microwave Integrated Circuit
DC/DC-IC	DC/DC voltage converter integrated circuit	-MOSFET	Metal-Oxide-Semiconductor FET
ESDP-diode	ElectroStatic Discharge Protection diode	-MESFET	MEtal-Semiconductor FET
ESD-Prot	ElectroStatic Discharge Protection thyristor	n-	n-channel junction transistor
-FET	Field Effect Transistor	n/p-	n-channel and p-channel transistors area
HEMT	High electron mobility transistors	Op-IC	Operational amplifier integrated circuit
H-IC	Hall-effect sensor integrated circuit	p-	p-channel junction transistor
HSPS-IC	High-side power switch integrated circuit	PDS-IC	Power distribution switch integrated circuit
IGBT	Insulated Gate Bipolar Transistor	PHEMT	Pseudomorphic high electron mobility transistors
IGBT+Di	Insulated Gate Bipolar Transistor with antiparallel diode	PIN-diode	Diode with a wide, undoped intrinsic semiconductor region
		PSW-IC	Power Switch IC
		Si-diode	Silicon diode
		SiGe-diode	Silicon/Germanium diode
		Si-npn	Silicon npn transistor
		Si-n/p	Silicon npn and pnp transistors area
		Si-npn-Darl	Silicon npn Darlington transistor

SECTION 1
6 and more pin case SMD semiconductor components



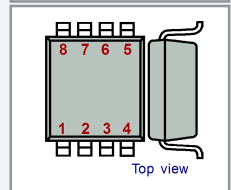
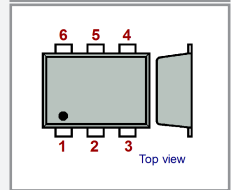
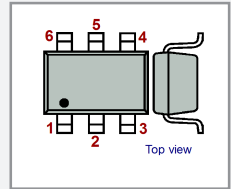
SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
+AAAA	MAX9718AEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V 1.4W(5V/4Q), select shutdown	-	-	60	AFP19	Max
+AAAB	MAX9718BEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V, 1.4W(5V/4Q), select shutdown	-	-	60	AFP20	Max
+AAAC	MAX9718CEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V, 1.4W(5V/4Q), select shutdown	-	-	60	AFP20	Max
+AAAD	MAX9718DEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V, 1.4W(5V/4Q), select shutdown	-	-	60	AFP20	Max
+AAAJ	MAX9718EEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V, 1.4W(5V/4Q), select shutdown	-	-	60	AFP20	Max
+AAAK	MAX9718FEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V, 1.4W(5V/4Q), select shutdown	-	-	60	AFP20	Max
+AAAL	MAX9718GEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V, 1.4W(5V/4Q), select shutdown	-	-	60	AFP20	Max
+AAAM	MAX9718HEUB+	Lin-IC	SOP-10	8d	APA, BTL, 2.7..5.5V, 1.4W(5V/4Q), select shutdown	-	-	60	AFP20	Max
+ACLW	MAX1605AUT+T	Vdet-IC	SOT-23-6	7b	Adjustable sequencing/supervisory, 2.25..16V, ODO	-	-	33	-	Max
+ACLX	MAX1605AUT+T	Vdet-IC	SOT-23-6	7b	Adjustable sequencing/supervisory, 2.25..16V, PPO	-	-	33	-	Max
00	KIC7W00FK	CMOS-Log	US8	8cb	Dual 2-input NAND gate	-	-	55	Log50	Kec
00	XC74WL00AASR	CMOS-Log	MSOP-8B	8da	Dual 2-input NAND gate	L08	-	55	Log50	Tor
005	FAN7005MU	Lin-IC	SSOP-8	8d	APA, 2.7..5.5V, 2x300mW(5V/8Q), shutdown	-	-	47	AFP17	F
00B	U74HC2G02-SM1	CMOS-Log	MSOP-8	8da	Dual 2-input NOR gate	L08	-	47	Log53	Utc
00BL	U74HC2G02L-SM1	CMOS-Log	MSOP-8	8da	Dual 2-input NOR gate, Lead-free	L08	-	47	Log53	Utc
00W	U74HC2G00-SM1	CMOS-Log	MSOP-8	8da	Dual 2-input NAND gate	L08	-	47	Log50	Utc
00WL	U74HC2G00L-SM1	CMOS-Log	MSOP-8	8da	Dual 2-input NAND gate, Lead-free	L08	-	47	Log50	Utc
011	AP64011-GV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=3.0V/3.3V±2%, 250mA, +CE, H-free	K14a.	-	33x5	VR19	Anw
011	AP64011-PV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=3.0V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Anw
011	EC49222-1-B3F	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=3.0V/3.3V±2%, 250mA, +CE, L-Free	-	14	33x5	VR19	Ecm
011	EC49222-1-B3G	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=3.0V/3.3V±2%, 250mA, +CE, H-Free	K14.	14	33x5	VR19	Ecm
011	GS6202RQRF	LVR-IC	SOT-23-6L	7b	LDO, Dual out, Vout1/Vout2=3.0V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Glo
012	AP64012-GV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=1.8V/3.0V±2%, 250mA, +CE, H-free	K14a.	-	33x5	VR19	Anw
012	AP64012-PV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=1.8V/3.0V±2%, 250mA, +CE	-	-	33x5	VR19	Anw
012	EC49222-2-B3F	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=1.8V/3.0V±2%, 250mA, +CE, L-Free	-	14	33x5	VR19	Ecm
012	EC49222-2-B3G	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=1.8V/3.0V±2%, 250mA, +CE, H-Free	K14.	14	33x5	VR19	Ecm
012	GS6202RFQF	LVR-IC	SOT-23-6L	7b	LDO, Dual out, Vout1/Vout2=1.8V/3.0V±2%, 250mA, +CE	-	-	33x5	VR19	Glo
013	AP64013-GV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=3.0V/3.0V±2%, 250mA, +CE, H-free	K14a.	-	33x5	VR19	Anw
013	AP64013-PV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=3.0V/3.0V±2%, 250mA, +CE	-	-	33x5	VR19	Anw
013	EC49222-3-B3F	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=3.0V/3.0V±2%, 250mA, +CE, L-Free	-	14	33x5	VR19	Ecm
013	EC49222-3-B3G	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=3.0V/3.0V±2%, 250mA, +CE, H-Free	K14.	14	33x5	VR19	Ecm
013	GS6202RQQF	LVR-IC	SOT-23-6L	7b	LDO, Dual out, Vout1/Vout2=3.0V/3.0V±2%, 250mA, +CE	-	-	33x5	VR19	Glo
014	EC49222-4-B3F	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=1.3V/2.8V±2%, 250mA, +CE, L-Free	-	14	33x5	VR19	Ecm
014	EC49222-4-B3G	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=1.3V/2.8V±2%, 250mA, +CE, H-Free	K14.	14	33x5	VR19	Ecm
01A	AP6401A-GV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=3.3V/3.3V±2%, 250mA, +CE, H-free	K14a.	-	33x5	VR19	Anw
01A	AP6401A-PV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=3.3V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Anw
01A	EC49222-A-B3F	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=3.3V/3.3V±2%, 250mA, +CE, L-Free	-	14	33x5	VR19	Ecm
01A	EC49222-A-B3G	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=3.3V/3.3V±2%, 250mA, +CE, H-Free	K14.	14	33x5	VR19	Ecm
01A	GS6202RRRF	LVR-IC	SOT-23-6L	7b	LDO, Dual out, Vout1/Vout2=3.3V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Glo
01B	AP6401B-GV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=2.8V/3.3V±2%, 250mA, +CE, H-free	K14a.	-	33x5	VR19	Anw
01B	AP6401B-PV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=2.8V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Anw
01B	EC49222-B-B3F	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=2.8V/3.3V±2%, 250mA, +CE, L-Free	-	14	33x5	VR19	Ecm
01B	EC49222-B-B3G	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=2.8V/3.3V±2%, 250mA, +CE, H-Free	K14.	14	33x5	VR19	Ecm
01B	GS6202RJRF	LVR-IC	SOT-23-6L	7b	LDO, Dual out, Vout1/Vout2=2.8V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Glo
01C	AP6401C-GV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=2.5V/3.3V±2%, 250mA, +CE, H-free	K14a.	-	33x5	VR19	Anw
01C	AP6401C-PV	LVR-IC	SOT-23-6	7pa	LDO, Dual output, Vout1/Vout2=2.5V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Anw
01C	EC49222-C-B3F	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=2.5V/3.3V±2%, 250mA, +CE, L-Free	-	14	33x5	VR19	Ecm
01C	EC49222-C-B3G	LVR-IC	SOT-23-6L	7pa	LDO, Dual out, Vout1/Vout2=2.5V/3.3V±2%, 250mA, +CE, H-Free	K14.	14	33x5	VR19	Ecm
01C	GS6202RRHF	LVR-IC	SOT-23-6L	7b	LDO, Dual out, Vout1/Vout2=2.5V/3.3V±2%, 250mA, +CE	-	-	33x5	VR19	Glo
01C25A	XC9101C25ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 2.5V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C26A	XC9101C26ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 2.6V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C27A	XC9101C27ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 2.7V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C28A	XC9101C28ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 2.8V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C29A	XC9101C29ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 2.9V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C30A	XC9101C30ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.0V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C31A	XC9101C31ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.1V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C32A	XC9101C32ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.2V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C33A	XC9101C33ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.3V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C34A	XC9101C34ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.4V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C35A	XC9101C35ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.5V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C36A	XC9101C36ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.6V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C37A	XC9101C37ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.7V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C38A	XC9101C38ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.8V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C39A	XC9101C39ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 3.9V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C40A	XC9101C40ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 4.0V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C41A	XC9101C41ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 4.1V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C42A	XC9101C42ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 4.2V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C43A	XC9101C43ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 4.3V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C44A	XC9101C44ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 4.4V±2.5%, 1.5A	-	09	47xd	DC17	Tor
01C45A	XC9101C45ASR	DC/DC-IC	SOP-8	8g	PWM, st-up, 4.5V±2.5%, 1.5A	-	09	47xd	DC17	Tor



SMD code	Type	Function	Case	Style	Short description	Atr	A.d.	Pin	Sch	Mnf
ZS7	LN5121B0085M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.085V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZS8	LN5121B0090M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.090V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZS9	LN5121B0095M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.095V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSA	LN5121B0100M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.100V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSB	LN5121B0105M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.105V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSC	LN5121B0110M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.110V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSD	LN5121B0115M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.115V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSE	LN5121B0120M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.120V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSF	LN5121B0125M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.125V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSH	LN5121B0130M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.130V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSK	LN5121B0135M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.135V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSL	LN5121B0140M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.140V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSM	LN5121B0145M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.145V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSN	LN5121B0150M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.150V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSP	LN5121B0155M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.155V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSR	LN5121B0160M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.160V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSS	LN5121B0165M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.165V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZST	LN5121B0170M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.170V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSU	LN5121B0175M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.175V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSV	LN5121B0180M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.180V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSX	LN5121B0185M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.185V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSY	LN5121B0190M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.190V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZSZ	LN5121B0195M	DC/DC-IC	SOT-23-6L	7d	PWM St-up, Vfb=0.195V, 300mA, 1MHz, +CE	-	58	33dd0	LD5	Nln
ZU04	KIC7WZU04FK	CMOS-Log	US8	8cb	Triple unbuffered inverters	-	-	55	Log56	Kec
ZU04	TC7WZU04FU	CMOS-Log	SM8	8a	Triple unbuffered inverter	-	-	55	Log56	Tos
ZU4	NC7WZU04P	CMOS-Log	SC-70-6	7ma	Dual inverter	-	-	33	Log24	F
ZZ	HSMS-286R	Si-diode	SOT-363	7mc	Quad, Schottky, 5V, Vf<0.6V(30mA), Cd<0.3pF, Rd=10Ω	-	-	33/D26	D26	Agi



SECTION 2
Conventional case drawings. Pin assignment



<p>29 Top view</p>	<p>33 Top view</p>	<p>34 Top view</p>	<p>35 Top view</p>
<p>41 Top view</p>	<p>43 Top view</p>	<p>44 Top view</p>	<p>47 Top view</p>
<p>55 Top view</p>	<p>60 Top view</p>	<p>72 Top view</p>	<p>112 Top view</p>
<p>166 Top view</p>	<p>169 Top view</p>		

SECTION 3
Pinout (table)



	PIN 1	PIN2	PIN3	PIN4	PIN5	PIN6	PIN7	PIN8
a0	GND	Output	Vcc	+Input	-Input	-	-	-
a1	GND	GND	Input	GND	GND	Vcc/Output	-	-
a2	N/C	Anode	Cathode	N/C	Adjust	-	-	-
a3	CE	GND	Vinput	Voutput	Adjust	N/C	-	-
a4	CE	Vinput	Voutput	Switch	GND	Feedback	-	-
a5	No data.	See datasht.	See sch	-	-	-	-	-
a7	CE	GND	SSC	Vinput	Voutput	-	-	-
a8	Test	GND	Tdet	N/C	Vcc	-	-	-
a9	Tdet	GND	Test	Vcc	-	-	-	-
aa	Input	GND	Vcc/Output	GND	-	-	-	-
aa*	A1=CE/MODE	A3=Voutput	B2=Lx	C1=Vinput	C3=GND	-	-	-
ab	Input	GND	GND	Output	GND	Vcc	-	-
ab*	A1=CE/MODE	A3=Feedb.	B2=Lx	C1=Vinput	C3=GND	-	-	-
ac	Vcc	GND	Input	GND	GND	Output	GND	GND
ac*	A1-CE	A2=Vinput	B1=GND	B2=Voutput	-	-	-	-
ad	Input	GND	Vcc	Output	GND	-	-	-
ae	Input	Vcc	GND	Output	GND	GND	-	-
af	N/C	Vinput	N/C	GND	N/C	Voutput	N/C	N/C
ag	Contact	Contact	N/C	-	-	-	-	-
ah	Emitter	Emitter	Base	Emitter	Emitter	Collector	-	-
ai	GND	Vcc	Input	Output	-	-	-	-
aj	GND	Vcc/Vout	GND	Input	-	-	-	-
ak	N/C	Cathode	Anode	-	-	-	-	-
am	Vcc/Output	GND	Input	GND	-	-	-	-
an	Output	GND	Input	Vcc	GND	-	-	-
ao	Cath.(Anode)	N/C	Cath.(Anode)	An.(Cath.)	-	-	-	-
ap	Cathode	N/C	Cathode	Anode	-	-	-	-
aq	Contact	N/C	Contact	-	-	-	-	-
ar	Contact	Contact	-	-	-	-	-	-
as	Emitter	Emitter	N/C	Base	Collector	Collector	Collector	Collector
at	Cathode	Gate	Anode	-	-	-	-	-
au	CE	SS	Voutput	Vinput	GND	Vbias	-	-
av	Vbias	GND	Vinput	Voutput	SS	CE	-	-
aw	CE	Ilim	Voutput	Vinput	GND	Vbias	-	-
ax	Vbias	GND	Vinput	Voutput	Ilim	CE	-	-
ax*	A1=CE1	A2=Voutput1	B1=GND	B2=Vinput	C1=CE2	C2=Voutput2	-	-
ay*	A1=Voutput2	A2=Vcc	A3=Voutput1	B1=CE2	B2=GND	B3=CE1	-	-
az	Vinput	N/C	Voutput	N/C	N/C	N/C	GND	CE
b0	IN1	POS	Vin	Vout	CE	GND	IN2	NEG
b1	Terminal	Gate	Terminal	-	-	-	-	-
ba	Anode/Cath.	Anode/Cath.	-	-	-	-	-	-
ba*	A1=GND	A2=Voutput	B1=CE	B2=Vinput	-	-	-	-
bb	Cathode1	Cathode2	Cathode3	Anode3	Anode2	Anode1	-	-
bb*	A1=GND	A2=CE	B1=Voutput	B2=Vinput	-	-	-	-
bc*	A1=Vinput	A2=Voutput	B1=CE	B2=GND	-	-	-	-
bd	Cathode	Cathode	Anode	-	-	-	-	-
bd*	A1=GND	A2=Vcc	B1=Reset	B2=MR	-	-	-	-
be*	A1=CE	A3=Cb	B2=GND	C1=Voutput	C3=Vinput	-	-	-
bf*	A1=Output L	A2=GND	A3=Output R	B1=Input L	B3=Input R	C1=Shutdown	C2=Vcc	C3=Cext
bg	Cathode1	Cathode2	Anode2	N/C	Anode1	-	-	-
bg*	A1=Voutput	A2=Vinput	B1=Adj	B2=CE	C1=GND	C2=Vbias	-	-
bh	Anode1	Com. Cath.	Anode2	Anode3	Anode4	-	-	-
bh*	A1=GND	A3=CE	B2=Cb	C1=Voutput	C3=Vinput	-	-	-
bi	Anode	Cathode	Anode	Anode	Cathode	Anode	-	-
bj*	A1=Voutput	A2=Vinput	B2=GND	C1=CE	C2= Vbias	-	-	-
bk*	A1=Voutput	A2=Vinput	B1=GND	B2=CE	-	-	-	-
bm1	N/C	Cout	Dout	GND	V+	V-	-	-
bm2	V-	V+	GND	Dout	Cout	-	-	-
bn	OVP	Vinput	CE	A GND	N/C	Feedback	Switching	P GND
bp	Cathode	Cathode	Anode	Anode	Cathode	Cathode	-	-
bq	GND	Voutput	Lx	-	-	-	-	-
br	GND	Voutput	Ext	-	-	-	-	-

SECTION 4

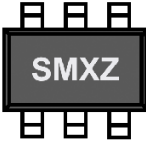
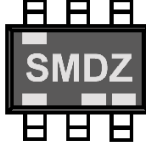
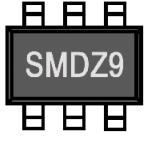
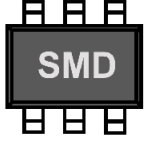
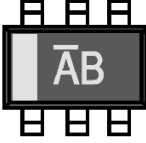
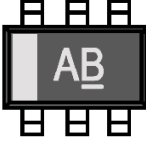
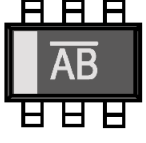
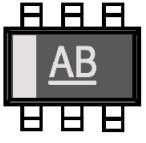
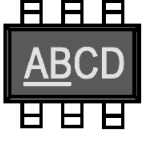
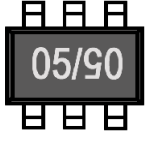
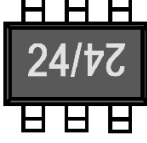
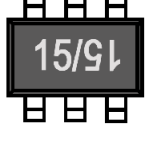
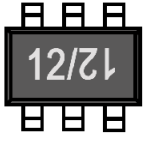
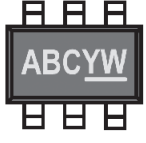
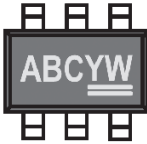
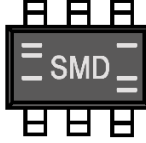
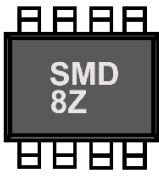
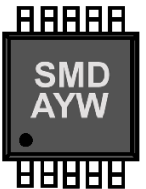
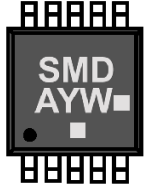
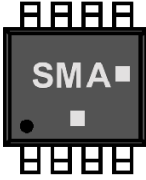
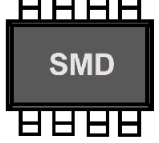


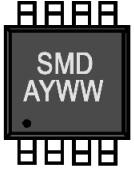
6 and more pin cases SMD-code marking style



<p>7a</p> <p>Manufacturer logo SMD code Data code (Y-year, WW-week)</p>	<p>7aa</p> <p>Bar combination of production year SMD code Bar combination of production week</p>	<p>7ab</p> <p>Bar combination of production year SMD code Bar combination of production week</p>	<p>7b</p> <p>SMD code</p>
<p>7ba</p> <p>Mark bar SMD code</p>	<p>7bb</p> <p>SMD code</p>	<p>7bc</p> <p>W-Week code Year code (Binary) SMD code</p>	<p>7c</p> <p>SMD code Data code (Y-year, M-month)</p>
<p>7ca</p> <p>Mark bar SMD code Data code (Y-year, M-month)</p>	<p>7cb</p> <p>SMD code Data code (SS-year)</p>	<p>7d</p> <p>SMD code Lot number</p>	<p>7da</p> <p>SMD code Lot number</p>
<p>7db</p> <p>SMD code Control code</p>	<p>7e</p> <p>SMD code Lot number</p>	<p>7ea</p> <p>SMD code Lot number</p>	<p>7f</p> <p>SMD code Lot number</p>
<p>7fa</p> <p>SMD code Lot number</p>	<p>7g</p> <p>SMD code Lot number</p>	<p>7ga</p> <p>SMD code Lot number</p>	<p>7gb</p> <p>SMD code Lot number</p>
<p>7gc</p> <p>Lot number SMD code Data code (Y-year, M-month)</p>	<p>7gd</p> <p>Lot number SMD code Data code (Y-year, M-month)</p>	<p>7h</p> <p>SMD code Manufacturer logo Lot number</p>	<p>7ha</p> <p>SMD code Lot number Lot Sub number</p>

SECTION 5
6 and more pin cases SMD-code attribute



<p style="text-align: center; color: red;">K01</p> 	<p style="text-align: center; color: red;">K02</p> 	<p style="text-align: center; color: red;">K03</p> 	<p style="text-align: center; color: red;">K04</p> 
<p style="text-align: center; color: red;">K05</p> 	<p style="text-align: center; color: red;">K06</p> 	<p style="text-align: center; color: red;">K07</p> 	<p style="text-align: center; color: red;">K08</p> 
<p style="text-align: center; color: red;">K09</p> 	<p style="text-align: center; color: red;">K10</p> 	<p style="text-align: center; color: red;">K11</p> 	<p style="text-align: center; color: red;">K12</p> 
<p style="text-align: center; color: red;">K13</p> 	<p style="text-align: center; color: red;">K14</p> 	<p style="text-align: center; color: red;">K14a</p> 	<p style="text-align: center; color: red;">K15</p> 
<p style="text-align: center; color: red;">L01</p> 	<p style="text-align: center; color: red;">L02</p> 	<p style="text-align: center; color: red;">L02a</p> 	<p style="text-align: center; color: red;">L03</p> 
<p style="text-align: center; color: red;">L04</p> 	<p style="text-align: center; color: red;">L05</p> 	<p style="text-align: center; color: red;">L06</p> 	<p style="text-align: center; color: red;">L07</p> 

SECTION 6
Additional production data info



Besides SMD code, the manufacturers can place additional information such as **internal production lot number, traceability code, data of production, assembly location** etc. The additional info is an arbitrary position and arbitrary content (depending on the manufacturer) and can be alphanumeric symbol (symbols) or graphic symbol.

Below we present some additional info.

Lot number.

Manufacturer: **Elm (ELM Technology Corporation):**

Rules 1 (for ODO voltage detectors)

Symbol 1 - A to Z(I, O, X excepted)

Symbol 2 - 0 to 9

Rules 2 (for PPO voltage detectors)

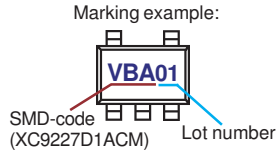
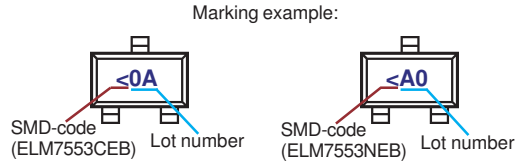
Symbol 1 - 0 to 9

Symbol 2 - A to Z(I, O, X excepted)

Manufacturer: **Tor (Torex Semiconductor LTD):**

01~09, 0A~0Z, 11~9Z, A1~A9, AA~AZ, B1~ZZ repeated,

(G, I, J, O, Q, W excluded.) * No character inversion used.



Production data

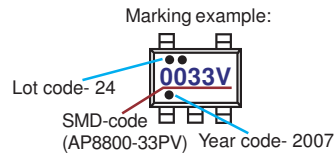
Manufacturer: **Anw (Anwell Semiconductor Corp.)**

Dot above product code: Lot Code:

1		•	17	•		•
2		•	18	•		•
3		•	19	•		•
4	•		20	•	•	
5	•		21	•	•	•
6	•	•	22	•	•	•
7	•	•	23	•	•	•
8	•		24	•	•	
9	•		25	•	•	•
10	•	•	26	•	•	•
11	•	•	27	•	•	•
12	•	•	28	•	•	•
13	•	•	29	•	•	•
14	•	•	30	•	•	•
15	•	•	31	•	•	•
16	•					

Dot under product code: Year Code:

2003			
2004			•
2005	•	•	
2006	•	•	•
2007	•		
2008	•		•
2009	•	•	
2010	•	•	•



Manufacturer: **Ape (Advanced Power Electronics Corp.)**

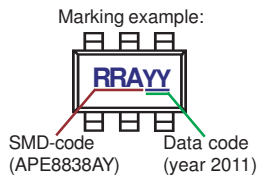
Code Year

YY 2004, 2008, 2012

YY 2003, 2007, 2011

YY 2002, 2006, 2010

YY 2001, 2005, 2009



Manufacturer: **Axl (AXElite Technology Co., Ltd)**

Code Year Code Week

7 2007 **A...Z** 1...26

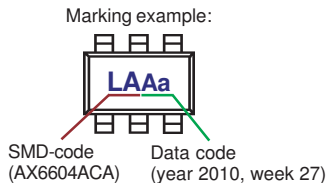
8 2008 **a...z** 27...52

9 2009

A 2010

B 2011

C 2012

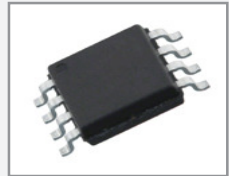
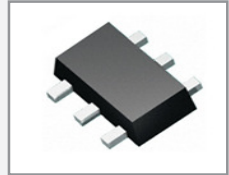




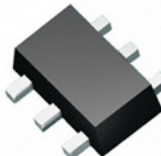
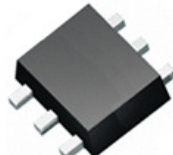
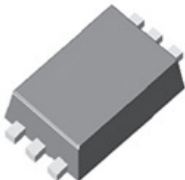

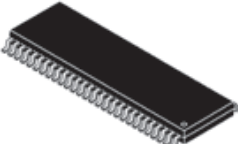














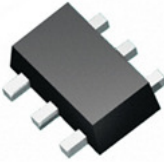
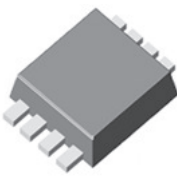

Manufacturer: **Di (Diodes Inc.)**

Y : Year : 0~9XXX

W : Week : A~Z : 1~26 week; a~z : 27~52 week; z represents 52 and 53 week

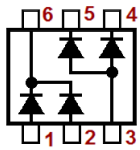
SECTION 7
Case drawings



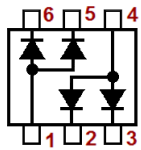
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 <p>HSO6 SNT-6A</p>	 <p>HSOP-6J</p>	 <p>HTSSOP-54</p>	 <p>HSNT-6A</p>
 <p>MICRO8</p>	 <p>Mini6-G4-B</p>	 <p>MSOP-6 TSOT-23-6L TSOT-23-6 US6</p>	 <p>MS8 MSOP-8 MSOP-8B MSOP-8A MSOP-8L</p>
 <p>MSOP-10 SSOP-10</p>	 <p>MW6</p>	 <p>PSOP-8</p>	 <p>S8 SM8 SOP-8 SOP-8 SOP8-P-1.27</p>
 <p>SC-70-6 SC-88 SC-74 SC-95 SC-74R SM6</p>	 <p>SC70JW-8</p>	 <p>SCT-595</p>	 <p>SCT-598</p>
 <p>SMini6</p>	 <p>SMini6-F3-B</p>	 <p>SNT-8A SON-8 VSON-8</p>	 <p>SOIC-8 SOP-8FD</p>

SECTION 8
Sample schematic diagram

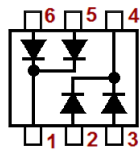




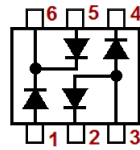
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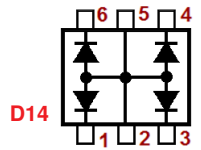
D12



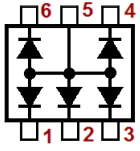
D12a



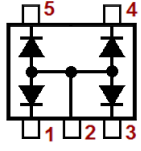
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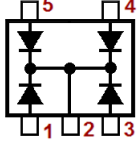
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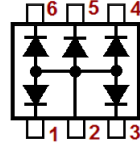
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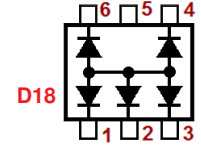
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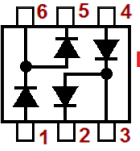
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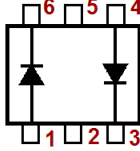
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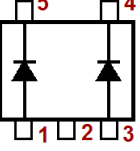
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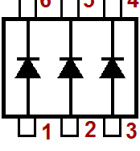
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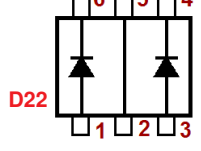
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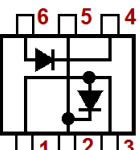
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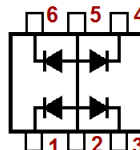
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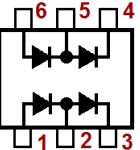
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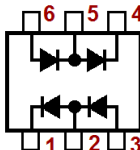
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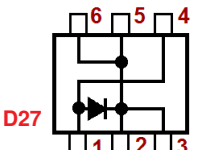
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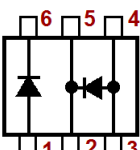
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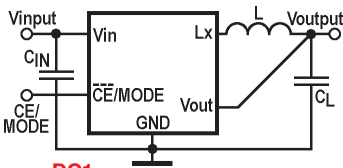
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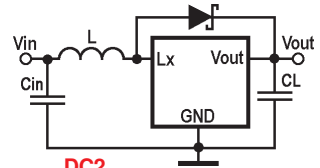
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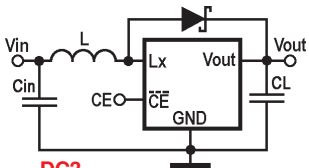
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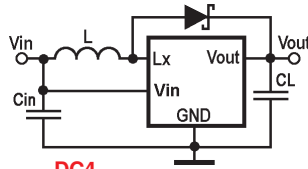
DC1



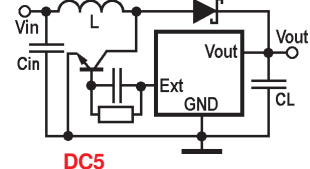
DC2



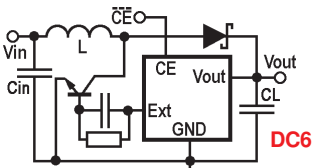
DC3



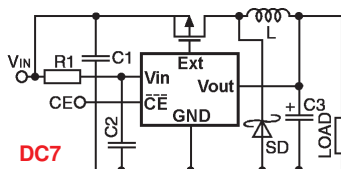
DC4



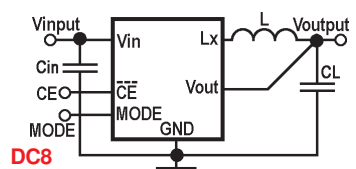
DC5



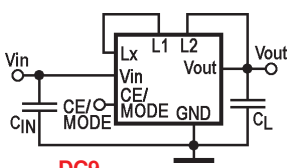
DC6



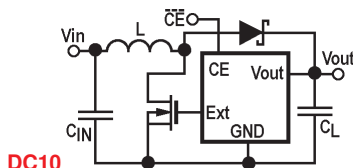
DC7



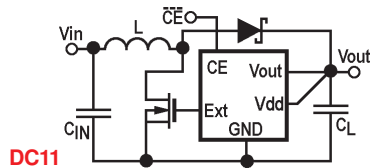
DC8



DC9



DC10



DC11



SECTION 9
Manufacturers name, logo and web page URL





Aat- Advanced Analog Technology
<http://www.aatech.com.tw/index.aspx>



Abl- ABLIC Inc.
<https://www.ablicinc.com/en/semicon/>



Ad- Analog Devices
<http://www.analog.com>



Adt- ADDtek
<http://www.addmtek.com/Index.htm>



Afs- Analog Future Chip Co., Ltd.
<http://www.afsemi.com/>



Agi- Agilent Technologies
www.semiconductor.agilent.com



Aic- Analog Integrations Corporation
<http://www.analog.com.tw>



Ali- Alliance Semiconductor
<http://www.alsc.com>



All- Allegro MicroSystems Inc.
<http://www.allegromicro.com>



Alt- Aolittel Technology Co., Ltd
<http://www.aolittel.com>



Ame- AME, Inc.
www.ame.com.tw



Ams- AMOS Technology Limited
<http://www.amos-tech.com>



Amz- Amazing Microelectronic
<http://www.amazingIC.com>



Ana- Anachip Corp.
www.anachip.com.tw



Anb- Anbon Semiconductor Co., Ltd.
<http://www.anbonsemi.com>



Anp- Anpec Electronics Corp.
www.anpec.com.tw



Ans- AnaSem Inc.
<http://www.anasem.net/>



Ant- Advanced Analog Technologies, Inc.
<http://www.analogictech.com>



Anv- Anova Technologies Co. Ltd
<http://anova-semi.com/>



Anw- Anwell Semiconductor Corp.
<http://www.ansc.com.tw/>



Aom- Alpha & Omega Semiconductor
<http://www.aosmd.com/>



Yea- Yeashin.Technology Co., Ltd

<http://www.yeashin.com/>



Yen- Yenyo Technology Co., Ltd.

<http://www.yenyo.com.tw/>



Ynt- Yint Electronics Co., Ltd.

<http://www.yint.com.cn>



Zbo- Zibo Micro Commercial Components Corp.

<http://www.zbmcc.com/en/>



Zbs- Zhide Electronics Co., Ltd

<http://www.senocn.com/>



Zhd- Zibo Seno Electronic Engineering Co., Ltd.

<http://www.cz-zhide.com/>



Zlg- Zilog, Inc.

<http://www.zilog.com/>



Zow- Zowie Technology Corporation

<http://www.zowie.com.tw/>



Zx- Zetex plc.

<http://www.zetex.com>



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