

General Purpose Linear ICs

■ Analog Master Slice

● Line-ups

Name of series	Supply voltage	Device characteristics						Remarks
		NPN Transistors			PNP Transistors			
		$f_{T,max}$	BV_{CEO}	h_{FE}	$f_{T,max}$	BV_{CEO}	h_{FE}	
AN9DX00	$\leq 12V$	2.6GHz	14.4V	100 to 250	1.0GHz	14.4V	66 to 200	
AN9CX00	$\leq 5V$	1.0GHz	7V	80 to 250	500MHz	7V	80 to 250	
AN9AX00	$\leq 30V$	200MHz	36V	125 to 400	6MHz	36V	125 to 500	

● AN9DX00 Series

Type No.	AN9DA00	AN9DB00	AN9DC00	* AN9DD00	AN9DE00	Remarks	
No. of pads	28	36	55	75	64		
Total number of elements	1287	2424	3854	6602	5106		
No. of transistors	306	600	920	1610	1288		
NPN	A11		320	560	448	Basic size	
	A21		160	280	224	2 times size	
	A62P	8	8			62 times size	
	B11	126	252			Basic size (with surrounded CW)	
PNP	LA1	84	168			Basic size (lateral)	
	LA4S	4	4			8 times size (lateral)	
	V11	84	168	320	560	448	Basic size (vertical)
	V21			120	210	168	2 times size (vertical)
No. of resistors	969	1800	2854	4852	3706		
SP	5k	474	888	1408	2440	1728	
	10k	198	336	480	800	640	
	SP2	2.5k	291	576	966	1338	Resistance variable
No. of capacitors	5p	12	24	80	140	112	

*: Under development

● AN9CX00 Series

Type No.	* AN9CA00	AN9CB00	Remarks	
No. of pads	40	52		
Total number of elements	2370	4248		
No. of transistors	432	768		
NPN	N11	216	384	Basic size
	P11	216	384	Basic size (vertical)
No. of resistors	1866	3352		
PW	10k	360	640	
	20k	324	576	
	50k	48	64	
SP	2k	684	1216	Resistance variable
	4k	90	168	Resistance variable
	5k	360	688	Resistance variable
No. of capacitors	5p	72	128	

*: Under development

● AN9AX00 Series

Type No.	AN9AA00	Remarks	
No. of pads	28		
Total number of elements	844		
No. of transistors	188		
NPN	W11	96	Basic size
	W62P	10	62 times size
PNP	LA1	80	Basic size (lateral)
	LA10	2	10 times size (lateral)
No. of diodes	9		
ZD	6.4V	9	Zener diode
No. of resistors	652		
SP	2k	608	Resistance variable
SQ	50k	40	
Epitaxial	100k	4	
No. of capacitors	4		
	10p	2	
	15p	2	

General Purpose Linear ICs

● Package List

Name of series		AN9DX00 Series					AN9CX00 Series		AN9AX00 Series
Name of master		AN9DA00	AN9DB00	AN9DC00	AN9DD00	AN9DE00	AN9CA00	AN9CB00	AN9AA00
Package	No. of pins								
DIP	16	○							
	18	○							
	20	○	○						
	22	○	○						
	24	○							
	28	○	○		○	○			○
SDIP	20	○							
	22	○							
	24	○	○						○
	28			○		○	○		
	42		○	○					○
	52			○		○			
SO	18	○	○						
	20	○	○						
	22	○	○						○
	24	○	○						○
	28	○	○	○		○	○		○
QFP	32	○	○				○		○
	44		○	○			○	○	○
	48		○	○	○	○	○	○	○
	64		○	○	○	○	○	○	○
	80			○	○		○	○	○
	84				○			○	

■ Operational Amplifier Series ($V_{CC} = 15V$, $V_{EE} = -15V$)

Category	Functions	Type No.	Package	Operating Power Supply Voltage Range		Power Consumption max (mW)	Input Offset Voltage max (mV)	Input Offset Current max (nA)	Input Bias Current max (nA)	Output Voltage min (V)	Slew Rate typ (V/ μ s)	Noise Voltage Converted to Input typ (μ Vrms)			
				No.	(V)								(V)		
Single power supply	General-use	Dual	AN6561	SIP009-P-0000C	B17	± 1.5 to ± 15	3 to 30	6	7 ^{*1}	50 ^{*1}	250 ^{*1}	$V_{CC} - 1.5$ ^{*1}	0.3 ^{*1}	6.0 ^{*1}	
			AN6561L	SIP009-P-0000D	B18										6
			AN1358 (AN6562)	DIP008-P-0300B	B35										6
		AN1358S (AN6562S)	SOP008-P-0225A	B60	6										
		Quad	AN1324 (AN6564)	DIP014-P-0300D	B37										10
			AN1324NS (AN6564NS)	SOP014-P-0225A	B63										10
	High output	Dual	AN6567	SIP009-P-0000D	B18	± 1.5 to ± 7.5	3 to 15	35 ^{*1}	5 ^{*1}	100 ^{*1}	500 ^{*1}	3.3 ^{*1} ($V_{CC} = 5V$)	1.0 ^{*1}	—	
			AN6568	DIP008-P-0300B	B35										
			AN6568S	SOP008-P-0225A	B60										
	Reference voltage built-in	Single	AN6500	DIP008-P-0300B	B35	± 1.5 to ± 12	3 to 24	20 ^{*1}	7 ^{*1}	300 ^{*1}	500 ^{*1}	3.5 ^{*1} ($V_{CC} = 5V$)	0.6 ^{*1}	—	
AN6500S			SOP008-P-0225A	B60											
AN6501			SIP007-P-0000	B14											

*1 $V_{CC} = 5V$, $V_{EE} = 0V$, *2 $V_{CC} = 2.5V$, $V_{EE} = -2.5V$ Note) Type No. in () is same chip. Only type No. is different.
 (Package Symbol) DIP = Dual-In-Line Package, SIP = Single-In-Line Plastic Package, SOP = Small Outline Package (PANAFAT PACKAGE)