



AiP74AUP2G08

Low Power Dual 2-Input And Gate

Product Specification

Specification Revision History:

Version	Date	Description
2025-02-A0	2025-02	New
2025-09-A1	2025-09	Modify the parameters



Contents

1、General Description.....	1
2、Block Diagram And Pin Description	2
2.1、Block Diagram	2
2.2、Pin Configurations.....	2
2.3、Pin Description.....	2
2.4、Function Table.....	3
3、Electrical Parameter	3
3.1、Absolute Maximum Ratings.....	3
3.2、Recommended Operating Conditions.....	3
3.3、Electrical Characteristics.....	4
3.3.1、DC Characteristics 1.....	4
3.3.2、DC Characteristics 2.....	5
3.3.3、DC Characteristics 3.....	6
3.3.4、AC Characteristics 1.....	7
3.3.5、AC Characteristics 2.....	8
3.3.6、AC Characteristics 3.....	9
4、Testing Circuit	10
4.1、AC Testing Circuit	10
4.2、AC Testing Waveforms.....	10
4.3、Measurement Points	10
4.4、Test Data	10
5、Package Information	11
5.1、XSON8.....	11
5.2、TSSOP8.....	12
5.3、VSSOP8	13
6、Statements And Notes	14
6.1、The name and content of Hazardous substances or Elements in the product	14
6.2、Notes	14



1、General Description

The AiP74AUP2G08 provides the dual the dual 2-input AND function. This device ensures a very low static and dynamic power consumption across the entire V_{CC} range from 0.8V to 3.6V.

Features:

- Wide supply voltage range from 0.8V to 3.6V
- Low static power consumption; $I_{CC}=1\mu A$ (maximum)
- Inputs accept voltages up to 3.6V
- Specified from $-40^{\circ}C$ to $+125^{\circ}C$
- Packaging information: XSON8/TSSOP8/VSSOP8

Ordering Information:

Reel packing specifications:

Part number	Packaging form	Marking code	Reel quantity	Boxed reel quantity	Notes
AiP74AUP2G08TA8.TR	TSSOP8	AiPHY 2G08	3000 PCS/reel	3000 PCS/box	Dimensions of plastic enclosure: 3.0mm×3.0mm Pin spacing: 0.65mm
AiP74AUP2G08YA8.TR	VSSOP8	AiP HYXX	3000 PCS/reel	3000 PCS/box	Dimensions of plastic enclosure: 2.0mm×2.3mm Pin spacing: 0.50mm
AiP74AUP2G08EB8.TR	XSON8	HY XX	5000 PCS/reel	25000 PCS/box	Dimensions of plastic enclosure: 1.35mm×1.0mm Pin spacing: 0.35mm

Note 1: “XX” refers to variable content, meaning year and package batch serial number.

Note 2: If the physical information is inconsistent with the ordering information, please refer to the actual product.



2、Block Diagram And Pin Description

2.1、Block Diagram

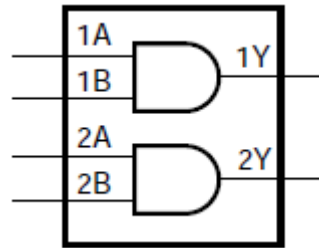


Figure 1. Logic symbol

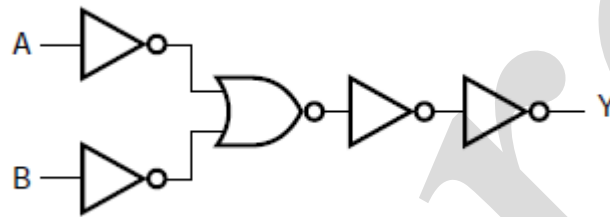


Figure 2. Logic diagram

2.2、Pin Configurations

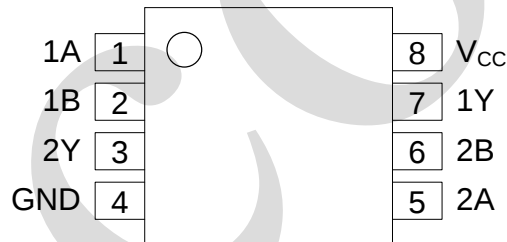


Figure 3. Pin configurations

2.3、Pin Description

Pin No.	Pin Name	Description
1, 5	1A, 2A	data input
2, 6	1B, 2B	data input
4	GND	ground (0V)
7, 3	1Y, 2Y	data output
8	V _{CC}	supply voltage



2.4、Function Table

Input		Output
nA	nB	nY
L	L	L
L	H	L
H	L	L
H	H	H

Note: H=HIGH voltage level; L=LOW voltage level.

3、Electrical Parameter

3.1、Absolute Maximum Ratings

($T_{amb}=25^{\circ}\text{C}$, all voltage referenced to GND (ground=0V), unless otherwise specified)

Characteristic	Symbol	Conditions	Min.	Max.	Unit
supply voltage	V_{CC}	-	-0.5	+4.6	V
input clamping current	I_{IK}	$V_I < 0V$	-50	-	mA
input voltage	V_I	[1]	-0.5	+4.6	V
output clamping current	I_{OK}	$V_O < 0V$	-50	-	mA
output voltage	V_O	Active mode ^[1]	-0.5	$V_{CC}+0.5$	V
		Power-down mode ^[1]	-0.5	+4.6	V
output current	I_O	$V_O=0V$ to V_{CC}	-	± 20	mA
supply current	I_{CC}	-	-	+50	mA
ground current	I_{GND}	-	-50	-	mA
storage temperature	T_{stg}	-	-65	+150	$^{\circ}\text{C}$
total power dissipation	P_{tot}	-	-	250	mW
soldering temperature	T_L	10s	260		$^{\circ}\text{C}$

Note:

[1] The input and output voltage ratings may be exceeded if the input and output current ratings are observed.

3.2、Recommended Operating Conditions

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
supply voltage	V_{CC}	-	0.8	-	3.6	V
input voltage	V_I	-	0	-	3.6	V
output voltage	V_O	Active mode	0	-	V_{CC}	V
		Power-down mode; $V_{CC}=0V$	0	-	3.6	V
ambient temperature	T_{amb}	-	-40	-	+125	$^{\circ}\text{C}$



3.3、Electrical Characteristics

3.3.1、DC Characteristics 1

($T_{amb}=25^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
HIGH-level input voltage	V_{IH}	$V_{CC}=0.8\text{V}$		0.72	-	-	V
		$V_{CC}=0.9\text{V to }1.95\text{V}$		$0.75 \times V_{CC}$	-	-	V
		$V_{CC}=2.3\text{V to }2.7\text{V}$		1.6	-	-	V
		$V_{CC}=3.0\text{V to }3.6\text{V}$		2.0	-	-	V
LOW-level input voltage	V_{IL}	$V_{CC}=0.8\text{V}$		-	-	$0.30 \times V_{CC}$	V
		$V_{CC}=0.9\text{V to }1.95\text{V}$		-	-	$0.35 \times V_{CC}$	V
		$V_{CC}=2.3\text{V to }2.7\text{V}$		-	-	0.7	V
		$V_{CC}=3.0\text{V to }3.6\text{V}$		-	-	0.9	V
HIGH-level output voltage	V_{OH}	$V_I=V_{IH} \text{ or } V_{IL}$	$I_O=-20\mu\text{A}; V_{CC}=0.8\text{V to }3.6\text{V}$	$V_{CC}-0.1$	-	-	V
			$I_O=-1.1\text{mA}; V_{CC}=1.1\text{V}$	$0.75 \times V_{CC}$	-	-	V
			$I_O=-1.7\text{mA}; V_{CC}=1.4\text{V}$	1.11	-	-	V
			$I_O=-1.9\text{mA}; V_{CC}=1.65\text{V}$	1.32	-	-	V
			$I_O=-2.3\text{mA}; V_{CC}=2.3\text{V}$	2.05	-	-	V
			$I_O=-3.1\text{mA}; V_{CC}=2.3\text{V}$	1.9	-	-	V
			$I_O=-2.7\text{mA}; V_{CC}=3.0\text{V}$	2.72	-	-	V
			$I_O=-4.0\text{mA}; V_{CC}=3.0\text{V}$	2.6	-	-	V
LOW-level output voltage	V_{OL}	$V_I=V_{IH} \text{ or } V_{IL}$	$I_O=20\mu\text{A}; V_{CC}=0.8\text{V to }3.6\text{V}$	-	-	0.1	V
			$I_O=1.1\text{mA}; V_{CC}=1.1\text{V}$	-	-	$0.3 \times V_{CC}$	V
			$I_O=1.7\text{mA}; V_{CC}=1.4\text{V}$	-	-	0.31	V
			$I_O=1.9\text{mA}; V_{CC}=1.65\text{V}$	-	-	0.31	V
			$I_O=2.3\text{mA}; V_{CC}=2.3\text{V}$	-	-	0.31	V
			$I_O=3.1\text{mA}; V_{CC}=2.3\text{V}$	-	-	0.44	V
			$I_O=2.7\text{mA}; V_{CC}=3.0\text{V}$	-	-	0.31	V
			$I_O=4.0\text{mA}; V_{CC}=3.0\text{V}$	-	-	0.44	V
input leakage current	I_I	$V_I=\text{GND to }3.6\text{V}; V_{CC}=0\text{V to }3.6\text{V}$		-	-	± 1	μA
OFF-state output current	I_{OZ}	$V_I=V_{IH} \text{ or } V_{IL}; V_O=0\text{V to }3.6\text{V}; V_{CC}=0\text{V to }3.6\text{V}$		-	-	± 1	μA
power-off leakage current	I_{OFF}	$V_I \text{ or } V_O=0\text{V to }3.6\text{V}; V_{CC}=0\text{V}$		-	-	± 1	μA
additional power-off leakage current	ΔI_{OFF}	$V_I \text{ or } V_O=0\text{V to }3.6\text{V}; V_{CC}=0\text{V to }0.2\text{V}$		-	-	± 1	μA
supply current	I_{CC}	$V_I=\text{GND or } V_{CC}; I_O=0\text{A}; V_{CC}=0.8\text{V to }3.6\text{V}$		-	-	1	μA
additional supply current	ΔI_{CC}	$V_I=V_{CC}-0.6\text{V}; I_O=0\text{A}; V_{CC}=3.3\text{V}; \text{one input at } V_{CC}-0.6\text{V}, \text{ other input at } V_{CC} \text{ or GND}$		-	-	40	μA



3.3.2、DC Characteristics 2

($T_{amb} = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
HIGH-level input voltage	V_{IH}	$V_{CC}=0.8\text{V}$	0.72	-	-	V
		$V_{CC}=0.9\text{V}$ to 1.95V	$0.75 \times V_{CC}$	-	-	V
		$V_{CC}=2.3\text{V}$ to 2.7V	1.6	-	-	V
		$V_{CC}=3.0\text{V}$ to 3.6V	2.0	-	-	V
LOW-level input voltage	V_{IL}	$V_{CC}=0.8\text{V}$	-	-	$0.30 \times V_{CC}$	V
		$V_{CC}=0.9\text{V}$ to 1.95V	-	-	$0.35 \times V_{CC}$	V
		$V_{CC}=2.3\text{V}$ to 2.7V	-	-	0.7	V
		$V_{CC}=3.0\text{V}$ to 3.6V	-	-	0.9	V
HIGH-level output voltage	V_{OH}	$V_I = V_{IH}$ or V_{IL}	$I_O = -20\mu\text{A}; V_{CC}=0.8\text{V}$ to 3.6V	$V_{CC}-0.1$	-	V
			$I_O = -1.1\text{mA}; V_{CC}=1.1\text{V}$	$0.7 \times V_{CC}$	-	V
			$I_O = -1.7\text{mA}; V_{CC}=1.4\text{V}$	1.03	-	V
			$I_O = -1.9\text{mA}; V_{CC}=1.65\text{V}$	1.30	-	V
			$I_O = -2.3\text{mA}; V_{CC}=2.3\text{V}$	1.97	-	V
			$I_O = -3.1\text{mA}; V_{CC}=2.3\text{V}$	1.85	-	V
			$I_O = -2.7\text{mA}; V_{CC}=3.0\text{V}$	2.67	-	V
			$I_O = -4.0\text{mA}; V_{CC}=3.0\text{V}$	2.55	-	V
LOW-level output voltage	V_{OL}	$V_I = V_{IH}$ or V_{IL}	$I_O = 20\mu\text{A}; V_{CC}=0.8\text{V}$ to 3.6V	-	0.1	V
			$I_O = 1.1\text{mA}; V_{CC}=1.1\text{V}$	-	$0.3 \times V_{CC}$	V
			$I_O = 1.7\text{mA}; V_{CC}=1.4\text{V}$	-	0.37	V
			$I_O = 1.9\text{mA}; V_{CC}=1.65\text{V}$	-	0.35	V
			$I_O = 2.3\text{mA}; V_{CC}=2.3\text{V}$	-	0.33	V
			$I_O = 3.1\text{mA}; V_{CC}=2.3\text{V}$	-	0.45	V
			$I_O = 2.7\text{mA}; V_{CC}=3.0\text{V}$	-	0.33	V
			$I_O = 4.0\text{mA}; V_{CC}=3.0\text{V}$	-	0.45	V
input leakage current	I_I	$V_I = \text{GND}$ to $3.6\text{V}; V_{CC}=0\text{V}$ to 3.6V	-	-	± 1	μA
OFF-state output current	I_{OZ}	$V_I = V_{IH}$ or $V_{IL}; V_O = 0\text{V}$ to $3.6\text{V}; V_{CC}=0\text{V}$ to 3.6V	-	-	± 1	μA
power-off leakage current	I_{OFF}	V_I or $V_O = 0\text{V}$ to $3.6\text{V}; V_{CC}=0\text{V}$	-	-	± 1	μA
additional power-off leakage current	ΔI_{OFF}	V_I or $V_O = 0\text{V}$ to $3.6\text{V}; V_{CC}=0\text{V}$ to 0.2V	-	-	± 1	μA
supply current	I_{CC}	$V_I = \text{GND}$ or $V_{CC}; I_O = 0\text{A}; V_{CC}=0.8\text{V}$ to 3.6V	-	-	1	μA
additional supply current	ΔI_{CC}	$V_I = V_{CC}-0.6\text{V}; I_O = 0\text{A}; V_{CC}=3.3\text{V};$ one input at $V_{CC}-0.6\text{V}$, other input at V_{CC} or GND	-	-	50	μA



3.3.3、DC Characteristics 3

($T_{amb}=-40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
HIGH-level input voltage	V _{IH}	V _{CC} =0.8V		0.75	-	-	V
		V _{CC} =0.9V to 1.95V		0.8×V _{CC}	-	-	V
		V _{CC} =2.3V to 2.7V		1.6	-	-	V
		V _{CC} =3.0V to 3.6V		2.0	-	-	V
LOW-level input voltage	V _{IL}	V _{CC} =0.8V		-	-	0.25×V _{CC}	V
		V _{CC} =0.9V to 1.95V		-	-	0.30×V _{CC}	V
		V _{CC} =2.3V to 2.7V		-	-	0.7	V
		V _{CC} =3.0V to 3.6V		-	-	0.9	V
HIGH-level output voltage	V _{OH}	V _I =V _{IH} or V _{IL}	I _O =-20uA; V _{CC} =0.8V to 3.6V	V _{CC} -0.11	-	-	V
			I _O =-1.1mA; V _{CC} =1.1V	0.6×V _{CC}	-	-	V
			I _O =-1.7mA; V _{CC} =1.4V	0.93	-	-	V
			I _O =-1.9mA; V _{CC} =1.65V	1.17	-	-	V
			I _O =-2.3mA; V _{CC} =2.3V	1.77	-	-	V
			I _O =-3.1mA; V _{CC} =2.3V	1.67	-	-	V
			I _O =-2.7mA; V _{CC} =3.0V	2.40	-	-	V
			I _O =-4.0mA; V _{CC} =3.0V	2.30	-	-	V
LOW-level output voltage	V _{OL}	V _I =V _{IH} or V _{IL}	I _O =20uA; V _{CC} =0.8V to 3.6V	-	-	0.11	V
			I _O =1.1mA; V _{CC} =1.1V	-	-	0.33×V _{CC}	V
			I _O =1.7mA; V _{CC} =1.4V	-	-	0.41	V
			I _O =1.9mA; V _{CC} =1.65V	-	-	0.39	V
			I _O =2.3mA; V _{CC} =2.3V	-	-	0.36	V
			I _O =3.1mA; V _{CC} =2.3V	-	-	0.50	V
			I _O =2.7mA; V _{CC} =3.0V	-	-	0.36	V
			I _O =4.0mA; V _{CC} =3.0V	-	-	0.50	V
input leakage current	I _I	V _I =GND to 3.6V; V _{CC} =0V to 3.6V		-	-	±1	uA
OFF-state output current	I _{OZ}	V _I =V _{IH} or V _{IL} ; V _O =0V to 3.6 V; V _{CC} =0V to 3.6V		-	-	±1	uA
power-off leakage current	I _{OFF}	V _I or V _O =0V to 3.6V; V _{CC} =0V		-	-	±1	uA
additional power-off leakage current	ΔI _{OFF}	V _I or V _O =0V to 3.6V; V _{CC} =0V to 0.2V		-	-	±1	uA
supply current	I _{CC}	V _I =GND or V _{CC} ; I _O =0A; V _{CC} =0.8V to 3.6V		-	-	1	uA
additional supply current	ΔI _{CC}	V _I =V _{CC} -0.6V; I _O =0A; V _{CC} =3.3V; one input at V _{CC} -0.6V, other input at V _{CC} or GND		-	-	75	uA



3.3.4、AC Characteristics 1

($T_{amb}=25^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ. ^[1]	Max.	Unit	
propagation delay	t _{PLH} , t _{PHL}	nA or nB to nY; see Figure 5	C _L =5pF				
			V _{CC} =0.8V	-	17.0	-	ns
			V _{CC} =1.1V to 1.3V	2.6	5.1	10.8	ns
			V _{CC} =1.4V to 1.6V	1.6	3.7	6.5	ns
			V _{CC} =1.65V to 1.95V	1.3	3.0	5.2	ns
			V _{CC} =2.3V to 2.7V	1.1	2.4	4.0	ns
			V _{CC} =3.0V to 3.6V	1.0	2.2	3.5	ns
			C _L =10pF				
			V _{CC} =0.8V	-	20.6	-	ns
			V _{CC} =1.1V to 1.3V	2.4	6.0	12.5	ns
			V _{CC} =1.4V to 1.6V	2.0	4.3	7.6	ns
			V _{CC} =1.65V to 1.95V	1.7	3.6	6.1	ns
			V _{CC} =2.3V to 2.7V	1.4	2.9	4.8	ns
			V _{CC} =3.0V to 3.6V	1.3	2.7	4.2	ns
			C _L =15pF				
			V _{CC} =0.8V	-	24.1	-	ns
			V _{CC} =1.1V to 1.3V	3.4	6.8	14.2	ns
			V _{CC} =1.4V to 1.6V	2.3	4.9	8.6	ns
			V _{CC} =1.65V to 1.95V	1.9	4.0	6.9	ns
			V _{CC} =2.3V to 2.7V	1.7	3.4	5.5	ns
			V _{CC} =3.0V to 3.6V	1.5	3.1	4.8	ns
			C _L =30pF				
			V _{CC} =0.8V	-	34.4	-	ns
			V _{CC} =1.1V to 1.3V	4.6	9.1	19.4	ns
			V _{CC} =1.4V to 1.6V	3.4	6.4	11.5	ns
			V _{CC} =1.65V to 1.95V	2.6	5.3	9.1	ns
			V _{CC} =2.3V to 2.7V	2.3	4.5	7.2	ns
			V _{CC} =3.0V to 3.6V	2.2	4.2	6.2	ns

Note:

[1] All typical values are measured at nominal V_{CC} .



3.3.5、AC Characteristics 2

($T_{amb} = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
propagation delay	t_{PLH} , t_{PHL}	nA or nB to nY; see Figure 5	$C_L=5\text{pF}$				
			$V_{CC}=1.1\text{V to } 1.3\text{V}$	2.1	-	11.7	ns
			$V_{CC}=1.4\text{V to } 1.6\text{V}$	1.5	-	7.5	ns
			$V_{CC}=1.65\text{V to } 1.95\text{V}$	1.3	-	6.1	ns
			$V_{CC}=2.3\text{V to } 2.7\text{V}$	1.0	-	4.8	ns
			$V_{CC}=3.0\text{V to } 3.6\text{V}$	0.9	-	4.3	ns
			$C_L=10\text{pF}$				
			$V_{CC}=1.1\text{V to } 1.3\text{V}$	2.2	-	13.6	ns
			$V_{CC}=1.4\text{V to } 1.6\text{V}$	1.8	-	8.9	ns
			$V_{CC}=1.65\text{V to } 1.95\text{V}$	1.6	-	7.2	ns
			$V_{CC}=2.3\text{V to } 2.7\text{V}$	1.3	-	5.7	ns
			$V_{CC}=3.0\text{V to } 3.6\text{V}$	1.2	-	4.7	ns
			$C_L=15\text{pF}$				
			$V_{CC}=1.1\text{V to } 1.3\text{V}$	3.1	-	15.7	ns
			$V_{CC}=1.4\text{V to } 1.6\text{V}$	2.1	-	10.1	ns
			$V_{CC}=1.65\text{V to } 1.95\text{V}$	1.8	-	8.2	ns
			$V_{CC}=2.3\text{V to } 2.7\text{V}$	1.6	-	6.5	ns
			$V_{CC}=3.0\text{V to } 3.6\text{V}$	1.5	-	5.9	ns
			$C_L=30\text{pF}$				
			$V_{CC}=1.1\text{V to } 1.3\text{V}$	4.1	-	21.8	ns
			$V_{CC}=1.4\text{V to } 1.6\text{V}$	2.9	-	13.6	ns
			$V_{CC}=1.65\text{V to } 1.95\text{V}$	2.4	-	10.9	ns
			$V_{CC}=2.3\text{V to } 2.7\text{V}$	2.2	-	8.6	ns
			$V_{CC}=3.0\text{V to } 3.6\text{V}$	2.1	-	7.5	ns



3.3.6、AC Characteristics 3

($T_{amb} = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$, voltages are referenced to GND (ground=0V), unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
propagation delay	t_{PLH} , t_{PHL}	nA or nB to nY; see Figure 5	$C_L = 5\text{pF}$			
			$V_{CC} = 1.1\text{V to } 1.3\text{V}$	-	-	12.9 ns
			$V_{CC} = 1.4\text{V to } 1.6\text{V}$	-	-	8.3 ns
			$V_{CC} = 1.65\text{V to } 1.95\text{V}$	-	-	6.7 ns
			$V_{CC} = 2.3\text{V to } 2.7\text{V}$	-	-	5.3 ns
			$V_{CC} = 3.0\text{V to } 3.6\text{V}$	-	-	4.8 ns
			$C_L = 10\text{pF}$			
			$V_{CC} = 1.1\text{V to } 1.3\text{V}$	-	-	15.0 ns
			$V_{CC} = 1.4\text{V to } 1.6\text{V}$	-	-	9.8 ns
			$V_{CC} = 1.65\text{V to } 1.95\text{V}$	-	-	7.9 ns
			$V_{CC} = 2.3\text{V to } 2.7\text{V}$	-	-	6.3 ns
			$V_{CC} = 3.0\text{V to } 3.6\text{V}$	-	-	5.2 ns
			$C_L = 15\text{pF}$			
			$V_{CC} = 1.1\text{V to } 1.3\text{V}$	-	-	17.3 ns
			$V_{CC} = 1.4\text{V to } 1.6\text{V}$	-	-	11.2 ns
			$V_{CC} = 1.65\text{V to } 1.95\text{V}$	-	-	9.0 ns
			$V_{CC} = 2.3\text{V to } 2.7\text{V}$	-	-	7.2 ns
			$V_{CC} = 3.0\text{V to } 3.6\text{V}$	-	-	6.5 ns
			$C_L = 30\text{pF}$			
			$V_{CC} = 1.1\text{V to } 1.3\text{V}$	-	-	24.0 ns
			$V_{CC} = 1.4\text{V to } 1.6\text{V}$	-	-	15.0 ns
			$V_{CC} = 1.65\text{V to } 1.95\text{V}$	-	-	12.1 ns
			$V_{CC} = 2.3\text{V to } 2.7\text{V}$	-	-	9.5 ns
			$V_{CC} = 3.0\text{V to } 3.6\text{V}$	-	-	8.3 ns



4、Testing Circuit

4.1、AC Testing Circuit

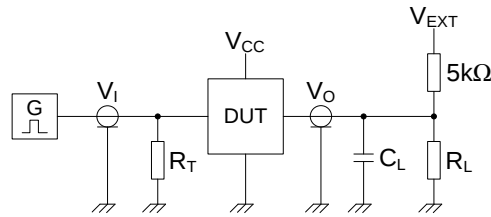


Figure 4. Test circuit for measuring switching times

Definitions for test circuit:

R_L =Load resistance.

C_L =Load capacitance including jig and probe capacitance.

R_T =Termination resistance should be equal to the output impedance Z_o of the pulse generator.

V_{EXT} =External voltage for measuring switching times.

4.2、AC Testing Waveforms

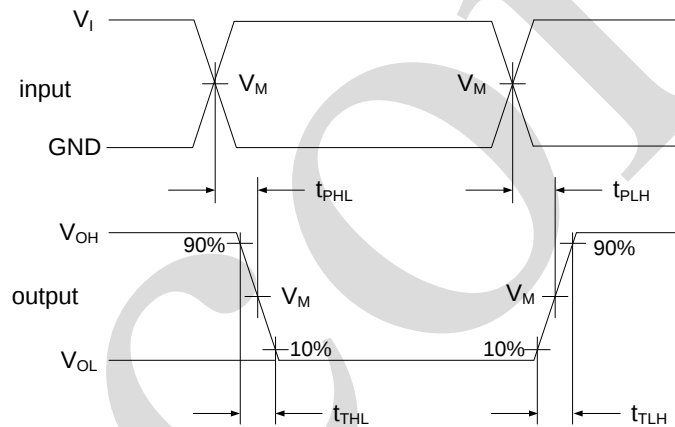


Figure 5. The data input (nA or nB) to output (nY) propagation delays

4.3、Measurement Points

Supply voltage	Input	Output
V_{CC}	V_M	V_M
0.8V to 1.6V	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$
1.65V to 2.7V	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$
3.0V to 3.6V	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$

4.4、Test Data

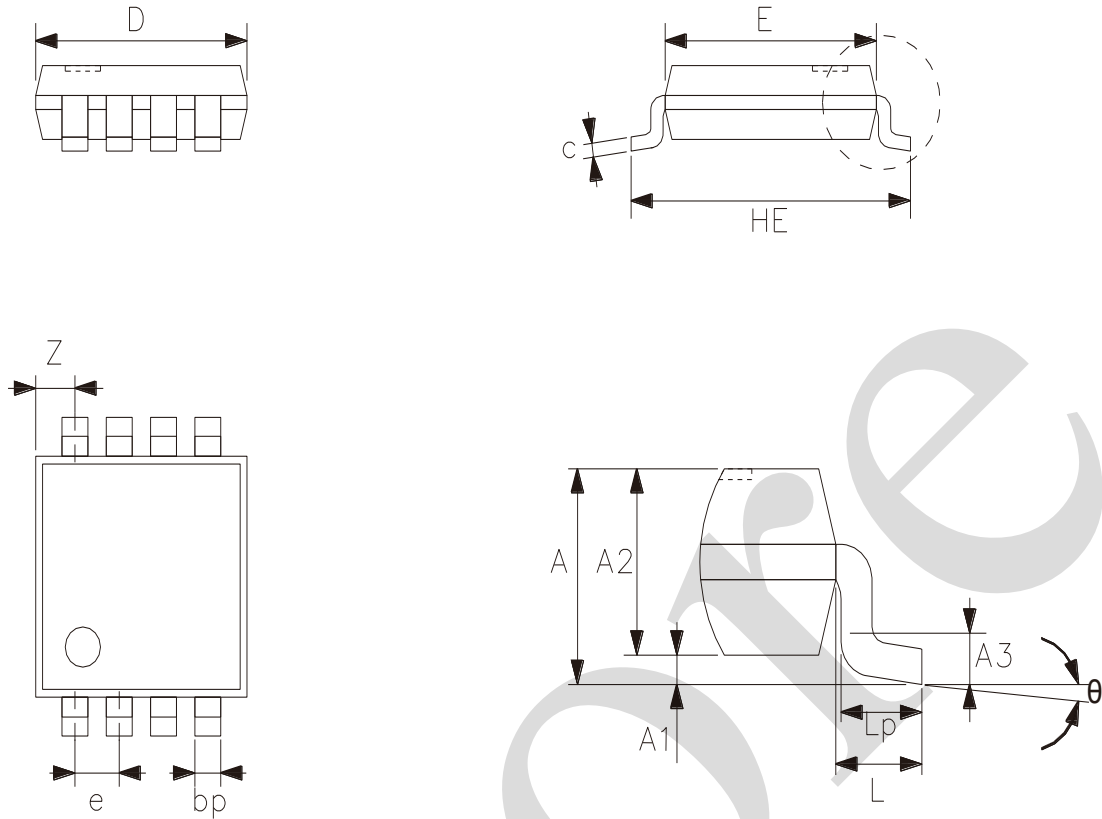
Supply voltage	Load		V_{EXT}		
V_{CC}	C_L	$R_L^{[1]}$	t_{PLH}, t_{PHL}	t_{PZH}, t_{PHZ}	t_{PZL}, t_{PLZ}
0.8V to 3.6V	5pF, 10pF, 15pF and 30pF	5kΩ or 1MΩ	open	GND	$2 \times V_{CC}$

Note:

[1] For measuring enable and disable times $R_L=5k\Omega$, for measuring propagation delays, setup and hold times and pulse width $R_L=1M\Omega$.



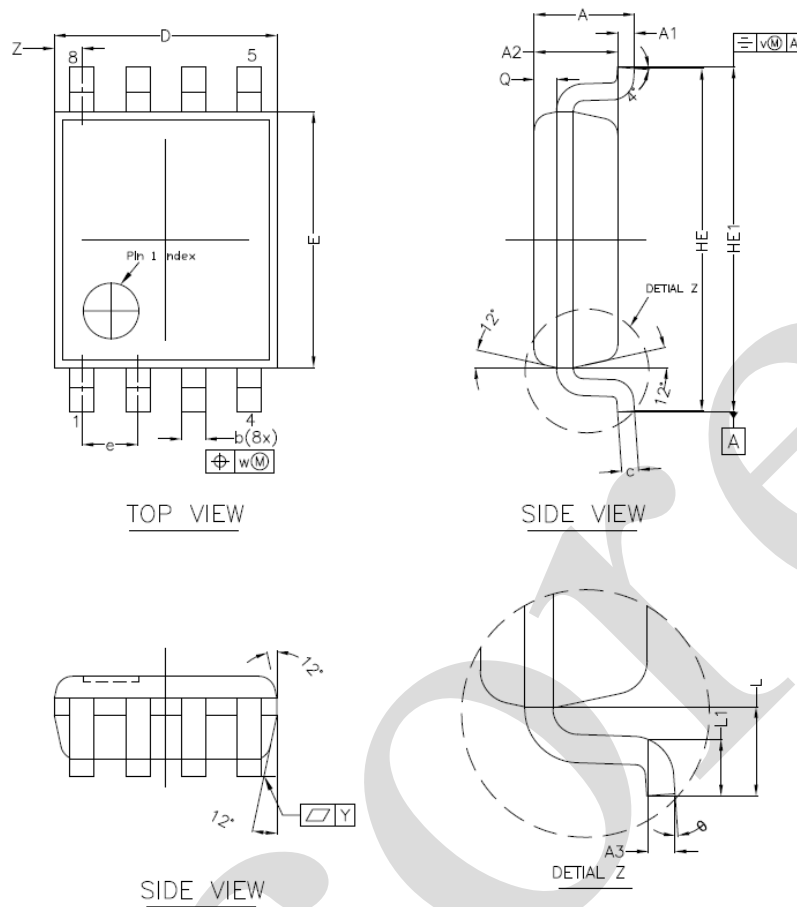
5.2、TSSOP8



2023/12/A	Dimensions In Millimeters	
Symbol	Min	Max
A	—	1.10
A1	0	0.15
A2	0.75	0.95
A3	0.25	
bp	0.22	0.38
c	0.08	0.18
D	2.90	3.10
E	2.90	3.10
HE	3.90	4.10
L	0.50	
Lp	0.33	0.47
e	0.65	
Z	0.35	0.70
θ	0°	8°



5.3、VSSOP8



NOTES
1.0 COP
DIE ATTA
2.0 D E

2023/12/A	Dimensions In Millimeters	
Symbol	Min	Max
A	—	1.00
A1	0.00	0.15
A2	0.60	0.85
A3	0.12	
Q	0.19	0.21
b	0.17	0.27
c	0.08	0.23
D	1.90	2.10
E	2.20	2.40
HE	3.00	3.20
HE1	3.00	3.40
e	0.50	
L	0.40	
L1	0.15	0.40
Y	0.10	
Z	0.10	0.40
θ	0°	8°



6、Statements And Notes

6.1、The name and content of Hazardous substances or Elements in the product

Part name	Hazardous substances or Elements									
	Lead and lead compounds	Mercury and mercury compounds	Cadmium and cadmium compounds	Hexavalent chromium compounds	Polybrominated biphenyls	Polybrominated biphenyl ethers	Dibutyl phthalate	Butylbenzyl phthalate	Di-2-ethylhexyl phthalate	Diisobutyl phthalate
Lead frame	○	○	○	○	○	○	○	○	○	○
Plastic resin	○	○	○	○	○	○	○	○	○	○
Chip	○	○	○	○	○	○	○	○	○	○
The lead	○	○	○	○	○	○	○	○	○	○
Plastic sheet installed	○	○	○	○	○	○	○	○	○	○
explanation	○: Indicates that the content of hazardous substances or elements in the detection limit of the following the SJ/T11363-2006 standard. ×: Indicates that the content of hazardous substances or elements exceeding the SJ/T11363-2006 Standard limit requirements.									

6.2、Notes

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