6-Channel, 1:2 Multiplexer and Demultiplexer with 1.8-V Logic Compatible Control Inputs

Features

- Supply Voltage: 2 V to 5.5 V
- On-State Resistance (8.5 Ω TYP at 3 V)
- High -3dB Bandwidth (BW = 500 MHz)
- Low Crosstalk (−60 dB at 10 MHz)
- High Off-Isolation (−62 dB at 10 MHz)
- 1.8-V Logic Threshold Compatibility for Control Inputs
- Break-before-make Switching
- Extended Industrial Temperature Range: −40℃ to 85℃
- Available in QFN4X4-24 Package

Applications

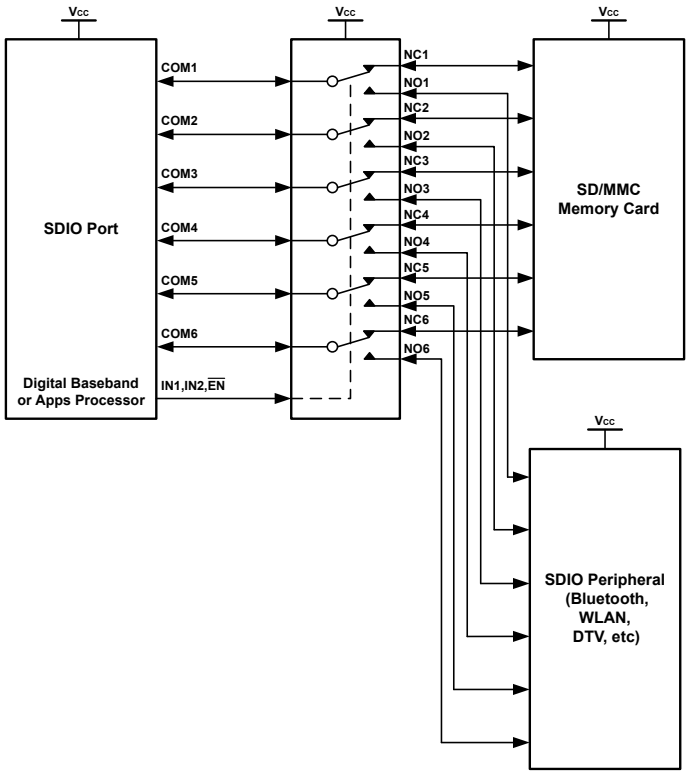
- SD-SDIO and MMC Two-port MUX
- PC VGA Video MUX-video Systems
- Audio and Video Signal Routing

Description

The TPW3625-S is a 6-channel, 1:2 multiplexer/ demultiplexer designed to operate from 2 V to 5.5 V. This device is capable of processing both digital and analog signals, allowing for bidirectional signal transmission up to V_{CC}. The TPW3625-S has two control pins, each controlling three 1:2 multiplexers. Additionally, a single enable pin can put all outputs in high-impedance mode. The control pins are compatible with a 1.8-V logic threshold, and are also backward compatible with 2.5-V and 3.3-V logic thresholds.

The TPW3625-S supports SD cards, SDIO cards, and multimedia card host controllers requiring expansion for multiple cards or peripherals, as the SDIO interface consists of 6 bits: CMD, CLK, and Data[0:3] signals. The TPW3625-S features two control pins, providing users with enhanced flexibility. For example, it enables the multiplexing of two distinct audio-video signals in devices such as LCD televisions, LCD monitors, or notebook docking stations.

Typical Application Circuit



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Revision History

Date	Revision	Notes
2025-03-10	Rev.A.0	Initial version

Pin Configuration and Functions

TPW3625-S
QFN4X4-24
Top View

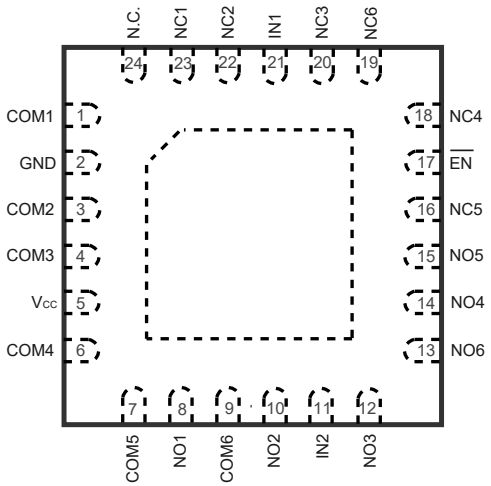


Table 1. Pin Functions

Pin No.	Name	I/O	Description
1	COM1	I/O	Common-signal port
2	GND	−	Ground
3	COM2	I/O	Common-signal port
4	COM3	I/O	Common-signal port
5	V_{CC}	−	Power supply
6	COM4	I/O	Common-signal port
7	COM5	I/O	Common-signal port
8	NO1	I/O	Normally open-signal port
9	COM6	I/O	Common-signal port
10	NO2	I/O	Normally open-signal port
11	IN2	I	Digital control to connect COM to NC or NO
12	NO3	I/O	Normally open-signal port
13	NO6	I/O	Normally open-signal port
14	NO4	I/O	Normally open-signal port
15	NO5	I/O	Normally open-signal port
16	NC5	I/O	Normally closed-signal port
17	$\overline{EN}$	I	Digital control to enable or disable all signal paths

Pin No.	Name	I/O	Description
18	NC4	I/O	Normally closed-signal port
19	NC6	I/O	Normally closed-signal port
20	NC3	I/O	Normally closed-signal port
21	IN1	I	Digital control to connect COM to NC or NO
22	NC2	I/O	Normally closed-signal port
23	NC1	I/O	Normally closed-signal port
24	N.C.	−	Not connected

Table 2. Function Table

$\overline{EN}$	IN1	IN2	NC1/2/3 TO COM1/2/3, COM1/2/3 TO NC1/2/3	NC4/5/6 TO COM4/5/6, COM4/5/6 TO NC4/5/6	NO1/2/3 TO COM1/2/3, COM1/2/3 TO NO1/2/3	NO4/5/6 TO COM4/5/6, COM4/5/6 TO NO4/5/6
H	X	X	OFF	OFF	OFF	OFF
L	L	L	ON	ON	OFF	OFF
L	H	L	OFF	ON	ON	OFF
L	L	H	ON	OFF	OFF	ON
L	H	H	OFF	OFF	ON	ON

Specifications

Absolute Maximum Ratings (1)

Parameter		Min	Typ	Max	Unit
V_{CC}	Supply Voltage Range	−0.3		5.5	V
V_{NC}, V_{NO}, V_{COM}	Analog Voltage Range	−0.3		5.5	V
I_K	Analog Port Diode Current	−50		0	mA
I_{NC}, I_{NO}, I_{COM}	ON-State Switch Current	−50		50	mA
V_I	Digital Input Voltage Range	−0.3		5.5	V
I_{IK}	Digital Input Clamp Current	−50		0	mA
I_{CC}	Continuous Current through VCC	0		100	mA
I_{GND}	Continuous Current through GND	−100		0	mA
T_J	Junction Temperature	−40		150	°C
T_{stg}	Storage Temperature	−65		150	℃
T_{OP}	Operating Temperature	−40		85	℃
T_{lead}	Lead Temperature (Soldering, 10 sec)		260		℃

(1) Stresses beyond those listed under Absolute Maximum Ratings may cause permanent damage to the device. Exposure to any Absolute Maximum Rating condition for extended periods may affect device reliability and lifetime.

ESD, Electrostatic Discharge Protection

Symbol	Parameter	Condition	Minimum Level	Unit
HBM	Human Body Model ESD	Human body model (HBM), per ANSI/ESDA/JEDEC JS-001, all pins (1)	±8	kV
CDM	Charged Device Model ESD	Charged device model (CDM), per JEDEC specification JESD22-C101, all pins (2)	±1.5	kV
LU	Latch-up Immunity	25℃	300	mA
		125℃	150	mA

(1) JEDEC document JEP155 states that 500-V HBM allows safe manufacturing with a standard ESD control process. Manufacturing with less than 500-V HBM is possible with the necessary precautions. Pins listed as ±6000 V may actually have higher performance.

(2) JEDEC document JEP157 states that 250-V CDM allows safe manufacturing with a standard ESD control process. Manufacturing with less than 250-V CDM is possible with the necessary precautions. Pins listed as ±500 V may actually have higher performance.

Recommended Operating Conditions (1)

All test conditions: over operating temperature range, unless otherwise noted.

Parameter		Min	Max	Unit
V_{CC}	Analog Supply Voltage	2.0	5.5	V
V_{NC}, V_{NO}, V_{COM}	Analog Signal Voltage	0	5.5	V
V_I	Digital Input Voltage	0	5.5	V
T_A	Operating Ambient Temperature	–40	85	°C

(1) The select input must be held HIGH or LOW and must not float.

Thermal Information

Package Type	θ_{JA}	θ_{JC}	Unit
QFN4x4-24	46	44	°C/W

Electrical Characteristics

All test conditions: V_{CC} = 3.0 V to 5.0 V, T_A = −40℃ to +85℃, unless otherwise noted.

Symbol	Parameter	Conditions	Temp	Min	Typ	Max	Unit
Power Supply							
I_{CC}	Positive Supply Current	V_{CC} = 3.6 V, V_I = V_{CC} or GND, Switch ON or OFF	Full		0.1	5.0	μA
Digital Input							
V_{IH}	Input Logic High	V_{CC} = 3.6 V		1.5			V
V_{IL}	Input Logic Low	V_{CC} = 3.6 V				0.6	V
I_{IH}	Input Leakage Current	V_{CC} = 3.6 V, I_{IN} = V_{CC}		−1.0	0.05	1.0	μA
I_{IL}	Input Leakage Current	V_{CC} = 3.6 V, I_{IN} = 0		−1.0	0.05	1.0	μA
Analog Switch							
V_{COM}, V_{NO}, V_{NC}	Analog Signal Range	V_{CC} = 3.0 V to 5.0 V		0.0		V_{CC}	V
R_{ON}	ON-State Resistance	V_{CC} = 3.0 V, 0 ≤ (V_{NC} or V_{NO}) ≤ V_{CC}, I_{COM} = −32 mA, Switch ON, Figure 11	25℃		8.5	12.8	Ω
			Full			14.0	Ω
ΔRON	ON-State Resistance Match Between Channels	V_{CC} = 3.0V, V_{NC} or V_{NO} = 2.1 V, I_{COM} = −32mA, Switch ON, Figure 11	25℃		0.75	1.9	Ω
			Full			2.2	Ω
$R_{FLAT(ON)}$	ON-State Resistance Flatness	V_{CC} = 3.0 V, 0 ≤ (V_{NC} or V_{NO}) ≤ V_{CC}, I_{COM} = −32 mA, Switch ON, Figure 11	25℃		4.5	6.2	Ω
			Full			6.5	Ω
$I_{NC(OFF)}$	NC OFF Leakage Current	V_{CC} = 3.6 V, V_{NC} or V_{NO} = 1 V, V_{COM}= 3 V, or V_{NC} or V_{NO} = 3 V, V_{COM} = 1 V, Switch OFF, Figure 12	Full	−1.0	0.05	1.0	μA
$I_{NO(OFF)}$	NO OFF Leakage Current	V_{CC} = 3.6 V, V_{NC} or V_{NO} = 1 V, V_{COM} = 3 V, or V_{NC} or V_{NO} = 3 V, V_{COM} = 1 V, Switch OFF, Figure 12	Full	−1.0	0.05	1.0	μA
$I_{COM(OFF)}$	COM OFF Leakage Current	V_{CC} = 3.6 V, V_{NC} or V_{NO} = 1 V, V_{COM} = 3 V, or V_{NC} or V_{NO} = 3 V, V_{COM} = 1 V, Switch OFF, Figure 12	Full	−1.0	0.05	1.0	μA
$I_{NC(ON)}$	NC ON Leakage Current	V_{CC} = 3.6 V, V_{NC} or V_{NO} = 1 V, V_{COM} = Open, or V_{NC} or V_{NO} = 3 V, V_{COM} = Open, Switch OFF, Figure 13	Full	−1.0	0.05	1.0	μA
$I_{NO(ON)}$	NO ON Leakage Current	V_{CC} = 3.6 V, V_{NC} or V_{NO} = 1 V, V_{COM} = Open, or V_{NC} or V_{NO} = 3 V, V_{COM} = Open, Switch ON, Figure 13	Full	−1.0	0.05	1.0	μA

Symbol	Parameter	Conditions	Temp	Min	Typ	Max	Unit
$I_{COM(ON)}$	COM ON Leakage Current	V_{CC} = 3.6 V, V_{NC} or V_{NO} = Open, V_{COM} = 1 V, or V_{NC} or V_{NO} = Open, V_{COM} = 3 V, Switch ON, Figure 13	Full	−1.0	0.05	1.0	μA
Dynamic Characteristics							
t_{ON_NC}	Turn-on Time	V_{CC} = 3.3 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		25.0		ns
t_{ON_NO}	Turn-on Time	V_{CC} = 3.3 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		17.0		ns
t_{OFF_NC}	Turn-off Time	V_{CC} = 3.3 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		8.0		ns
t_{OFF_NO}	Turn-off Time	V_{CC} = 3.3 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		12.5		ns
t_D	Break-Before-Make Time Delay	V_{CC} = 3.3 V, V_{NC} = V_{NO} = V_{CC} / 2, R_L = 50 Ω, C_L = 35 pF, Figure 15	25℃		12.0		ns
$C_{NC(OFF)}$	NC OFF Capacitance	V_{CC} = 3.3 V, V_{NC} = V_{CC} or GND, Switch OFF	25℃		4.0		pF
$C_{NO(OFF)}$)	NO OFF Capacitance	V_{CC} = 3.3 V, V_{NO} = V_{CC} or GND, Switch OFF	25℃		4.0		pF
$C_{COM(OFF)}$	COM OFF Capacitance	V_{CC} = 3.3 V, V_{NC} or V_{NO} = V_{CC} or GND, Switch OFF	25℃		9.0		pF
$C_{NC(ON)}$	NC ON Capacitance	V_{CC} = 3.3 V, V_{NC} = V_{CC} or GND, Switch ON	25℃		15.0		pF
$C_{NO(ON)}$	NO ON Capacitance	V_{CC} = 3.3 V, V_{NO} = V_{CC} or GND, Switch ON	25℃		15.0		pF
$C_{COM(ON)}$	COM ON Capacitance	V_{CC} = 3.3 V, V_{NC} or V_{NO} = V_{CC} or GND, Switch ON	25℃		15.0		pF
C_I	Digital Input Capacitance	V_{CC} = 3.3 V, V_I = V_{CC} or GND	25℃		4.5		pF
BW	−3dB Bandwidth	V_{CC} = 3.3 V, R_L = 50 Ω, Switch ON, Figure 17	25℃		500		MHz
O_{ISO}	OFF Isolation	V_{CC} = 3.3 V, R_L = 50 Ω, f = 10 MHz, Switch OFF, Figure 18	25℃		-57		dB
X_{TALK}	Crosstalk	V_{CC} = 3.3 V, R_L = 50 Ω, f = 10 MHz, Switch OFF, Figure 19	25℃		-55		dB
$X_{TALK(ADJ)}$	Crosstalk Adjacent	V_{CC} = 3.3 V, R_L = 50 Ω, f = 10 MHz, Switch OFF, Figure 19	25℃		-57		dB
Q_C	Charge Injection	V_{CC} = 3.3 V, V_{GEN} = 0 V, R_{GEN} = 0 V, C_L = 0.1 nF, Figure 16	25℃		1.2		pC
THD	Total Harmonic Distortion	V_{CC} = 3.3 V, R_L = 600 Ω, C_L = 50 pF, f = 20 Hz to 20 kHz, Figure 20	25℃		0.07		%

Electrical Characteristics (Continued)

All test conditions: V_{CC} = 2.3 V to 2.7 V, T_A = −40℃ to +85℃, unless otherwise noted.

Symbol	Parameter	Conditions	TEMP	MIN	TYP	MAX	UNIT
Power Supply							
I_{CC}	Positive Supply Current	V_{CC} = 2.7 V, V_I = V_{CC} or GND, Switch ON or OFF	Full		0.1	3.0	μA
Digital Input							
V_{IH}	Input Logic High	V_{CC} = 2.7 V		1.3			V
V_{IL}	Input Logic Low	V_{CC} = 2.7 V				0.5	V
I_{IH}	Input Leakage Current	V_{CC} = 2.7 V, I_{IN} = V_{CC}		−1.0	0.05	1.0	μA
I_{IL}	Input Leakage Current	V_{CC} = 2.7 V, I_{IN} = 0		−1.0	0.05	1.0	μA
Analog Switch							
V_{COM}, V_{NO}, V_{NC}	Analog Signal Range	V_{CC} = 2.3 V to 2.7 V		0.0		V_{CC}	V
R_{ON}	ON-State Resistance	V_{CC} = 2.3 V, 0 ≤ (V_{NC} or V_{NO}) ≤ V_{CC}, I_{COM} = -32 mA, Switch ON, Figure 11	25℃		11.5	25.5	Ω
			Full			27.0	Ω
ΔRON	ON-State Resistance Match Between Channels	V_{CC}=2.3 V, V_{NC} or V_{NO} = 1.6 V, I_{COM} = -32 mA, Switch ON, Figure 11	25℃		0.95	2.5	Ω
			Full			2.9	Ω
$R_{FLAT(ON)}$	ON-State Resistance Flatness	V_{CC} = 2.3 V, 0 ≤ (V_{NC} or V_{NO}) ≤ V_{CC}, I_{COM} = -32 mA, Switch ON, Figure 11	25℃		11.0	18.0	Ω
			Full			20.5	Ω
$I_{NC(OFF)}$	NC OFF Leakage Current	V_{CC} = 2.7 V, V_{NC} or V_{NO} = 0.5 V, V_{COM} = 2.3 V, or V_{NC} or V_{NO} = 2.3 V, V_{COM} = 0.5 V, Switch OFF, Figure 12	Full	−1.0	0.05	1.0	μA
$I_{NO(OFF)}$	NO OFF Leakage Current	V_{CC} = 2.7 V, V_{NC} or V_{NO} = 0.5 V, V_{COM} = 2.3 V, or V_{NC} or V_{NO} = 2.3 V, V_{COM} = 0.5 V, Switch OFF, Figure 12	Full	−1.0	0.05	1.0	μA
$I_{COM(OFF)}$	COM OFF Leakage Current	V_{CC} = 2.7 V, V_{NC} or V_{NO} = 0.5 V, V_{COM} = 2.3 V, or V_{NC} or V_{NO} = 2.3 V, V_{COM} = 0.5 V, Switch OFF, Figure 12	Full	−1.0	0.05	1.0	μA
$I_{NC(ON)}$	NC ON Leakage Current	V_{CC} = 2.7 V, V_{NC} or V_{NO} = 0.5 V, V_{COM} = Open, or V_{NC} or V_{NO} = 2.3 V, V_{COM} = Open, Switch OFF, Figure 13	Full	−1.0	0.05	1.0	μA
$I_{NO(ON)}$	NO ON Leakage Current	V_{CC} = 2.7 V, V_{NC} or V_{NO} = 0.5 V, V_{COM} = Open, or V_{NC} or V_{NO} = 2.3 V, V_{COM} = Open, Switch ON, Figure 13	Full	−1.0	0.05	1.0	μA

Symbol	Parameter	Conditions	TEMP	MIN	TYP	MAX	UNIT
$I_{COM(ON)}$	COM ON Leakage Current	V_{CC} = 2.7 V, V_{NC} or V_{NO} = Open, V_{COM} = 0.5 V, or V_{NC} or V_{NO} = Open, V_{COM} = 3 V, Switch ON, Figure 13	Full	−1.0	0.05	1.0	μA
Dynamic Characteristics							
t_{ON_NC}	Turn-on Time	V_{CC} = 2.5 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		34.0		ns
t_{ON_NO}	Turn-on Time	V_{CC} = 2.5 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		21.0		ns
t_{OFF_NC}	Turn-off Time	V_{CC} = 2.5 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		10.0		ns
t_{OFF_NO}	Turn-off Time	V_{CC} = 2.5 V, V_{COM} = V_{CC}, R_L = 50 Ω, C_L = 35 pF, Figure 14	25℃		20.0		ns
t_D	Break-Before-Make Time Delay	V_{CC} = 2.5 V, V_{NC} = V_{NO}= V_{CC} / 2, R_L = 50 Ω, C_L = 35 pF, Figure 15	25℃		17.0		ns
$C_{NC(OFF)}$	NC OFF Capacitance	V_{CC} = 2.5 V, V_{NC} = V_{CC} or GND, Switch OFF	25℃		4.0		pF
$C_{NO(OFF)}$)	NO OFF Capacitance	V_{CC} = 2.5 V, V_{NO} = V_{CC} or GND, Switch OFF	25℃		4.0		pF
$C_{COM(OFF)}$	COM OFF Capacitance	V_{CC} = 2.5 V, V_{NC} or V_{NO} = V_{CC} or GND, Switch OFF	25℃		10.0		pF
$C_{NC(ON)}$	NC ON Capacitance	V_{CC} = 2.5 V, V_{NC} = V_{CC} or GND, Switch ON	25℃		15.0		pF
$C_{NO(ON)}$	NO ON Capacitance	V_{CC} = 2.5 V, V_{NO} = V_{CC} or GND, Switch ON	25℃		15.0		pF
$C_{COM(ON)}$	COM ON Capacitance	V_{CC} = 2.5 V, V_{NC} or V_{NO} = V_{CC} or GND, Switch ON	25℃		15.0		pF
C_I	Digital Input Capacitance	V_{CC} = 2.5 V, V_I = V_{CC} or GND	25℃		4.0		pF
BW	−3dB Bandwidth	V_{CC} = 2.5 V, R_L = 50 Ω, Switch ON, Figure 17	25℃		500		MHz
O_{ISO}	OFF Isolation	V_{CC} = 2.5 V, R_L = 50 Ω, f = 10 MHz, Switch OFF, Figure 18	25℃		-55		dB
X_{TALK}	Crosstalk	V_{CC} = 2.5 V, R_L = 50 Ω, f = 10 MHz, Switch OFF, Figure 19	25℃		-55		dB
$X_{TALK(ADJ)}$	Crosstalk Adjacent	V_{CC} = 2.5 V, R_L = 50 Ω, f = 10 MHz, Switch OFF, Figure 19	25℃		-55		dB
Q_C	Charge Injection	V_{CC} = 2.5 V, V_{GEN} = 0 V, R_{GEN} = 0 V, C_L = 0.1 nF, Figure 16	25℃		0.9		pC
THD	Total Harmonic Distortion	V_{CC} = 2.5 V, R_L = 600 Ω, C_L = 50 pF, f = 20 Hz to 20 kHz, Figure 20	25℃		0.11		%

Typical Performance Characteristics

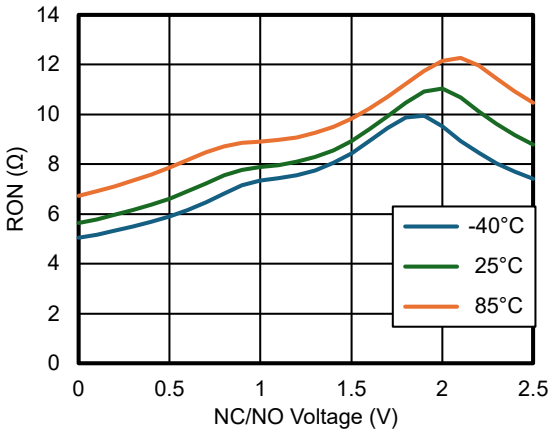


Figure 1. R_{ON}, V_{CC} = 2.5 V

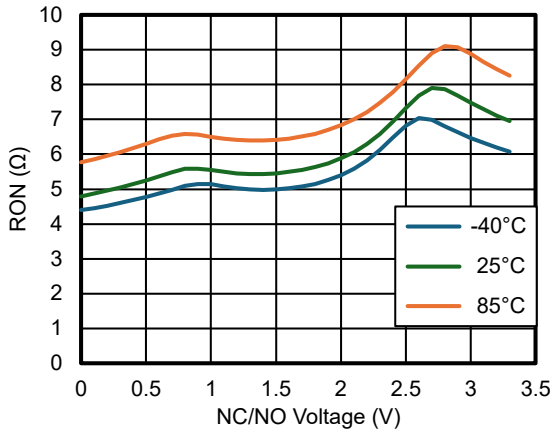


Figure 2. R_{ON}, V_{CC} = 3.3 V

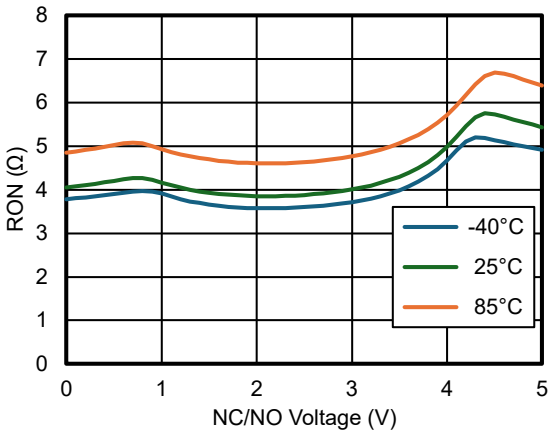


Figure 3. R_{ON}, V_{CC} = 5 V

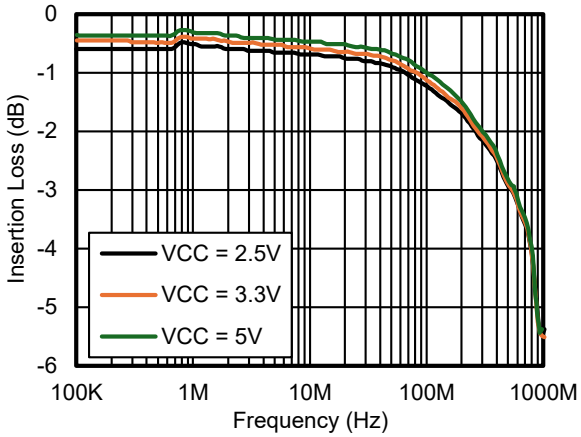


Figure 4. Insertion Loss

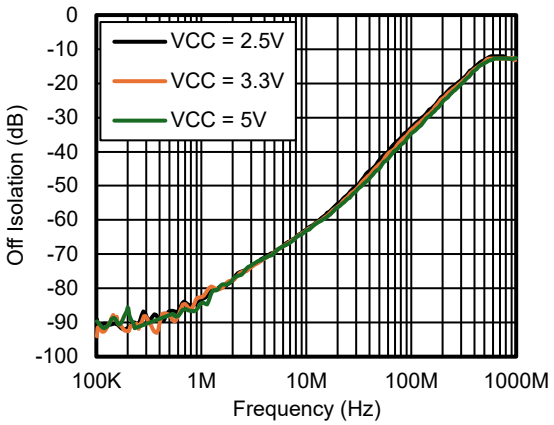


Figure 5. Off Isolation

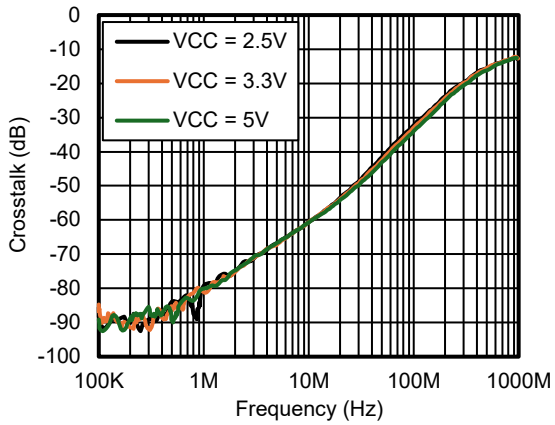


Figure 6. Crosstalk

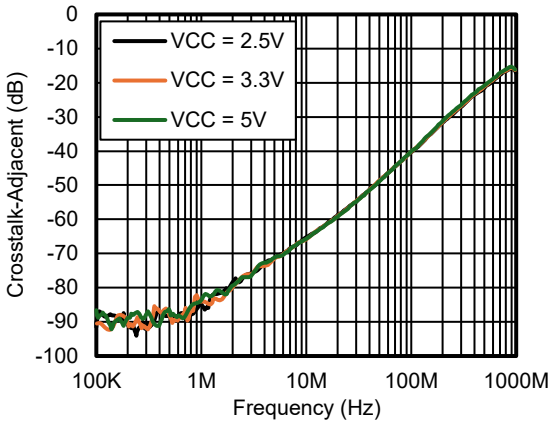


Figure 7. Crosstalk-Adjacent

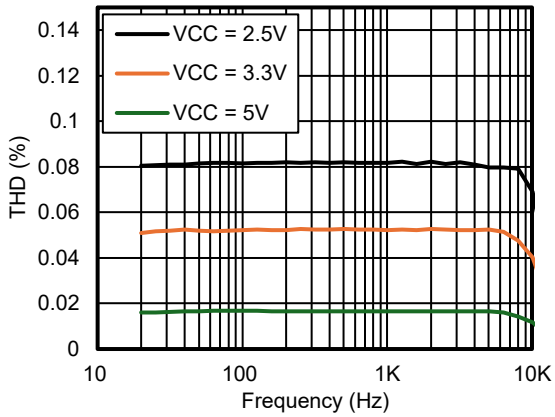


Figure 8. Total Harmonic Distortion

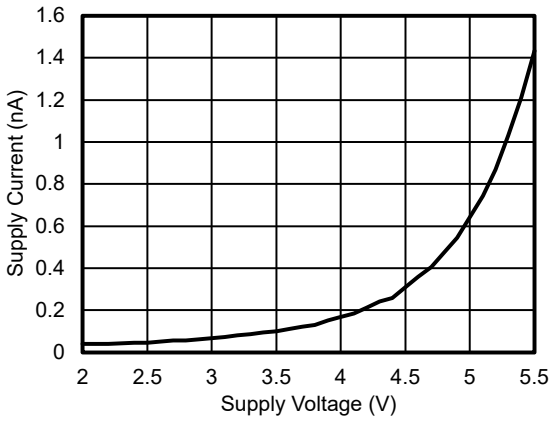


Figure 9. Supply Current

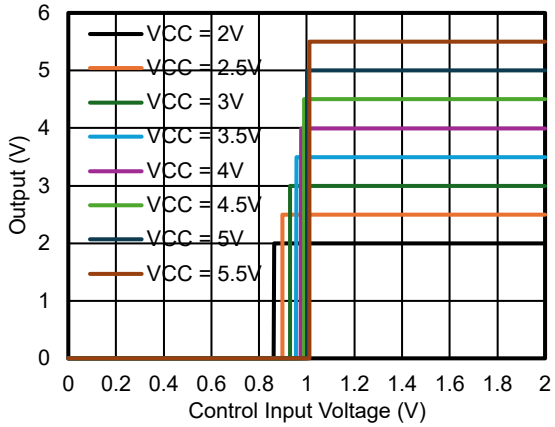


Figure 10. Control Input Thresholds

Test Circuit and Waveforms

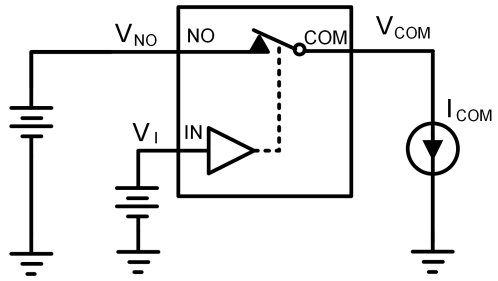


Figure 11. ON-State Resistance (R_{ON})

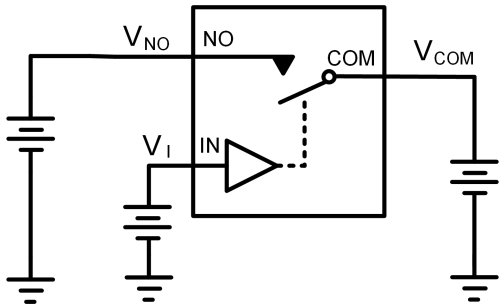


Figure 12. OFF-State Leakage Current

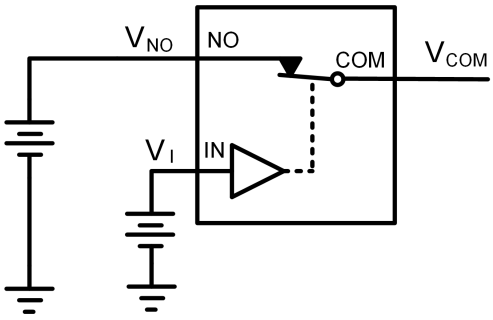


Figure 13. ON-State Leakage Current

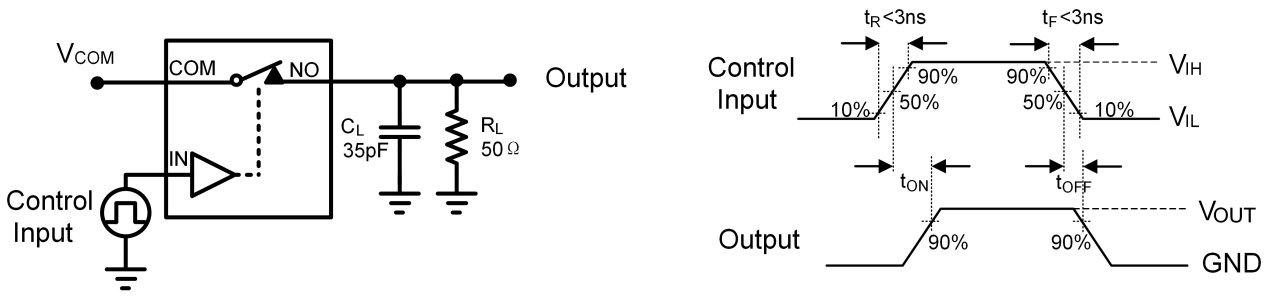


Figure 14. Turn-On (t_{ON}) and Turn-Off Time (t_{OFF})

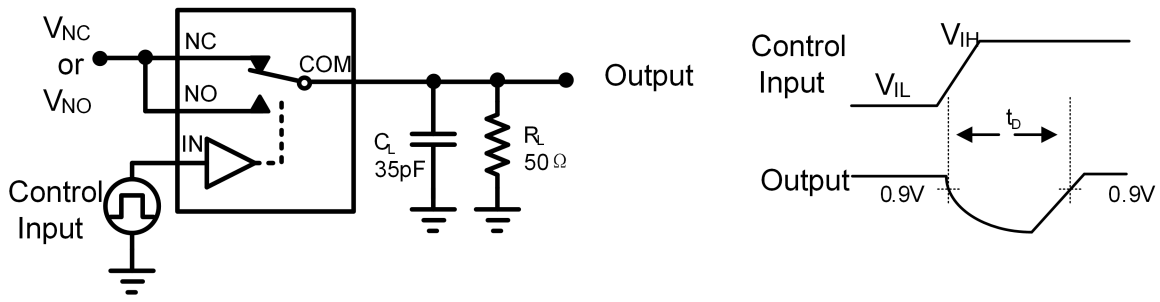


Figure 15. Break-Before-Make Time Delay (t_D)

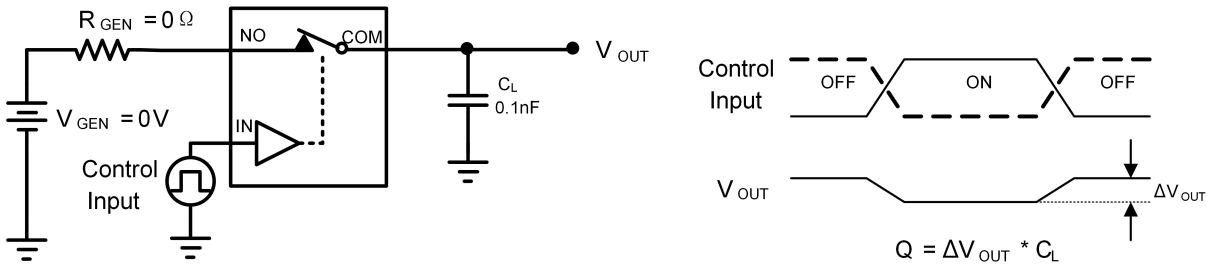


Figure 16. Charge Injection (Q_C)

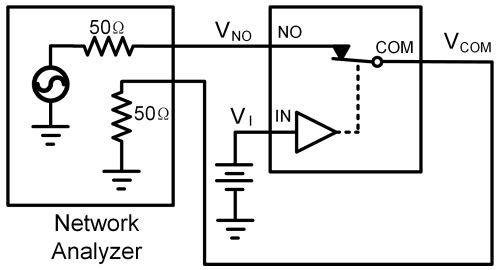


Figure 17. −3dB Bandwidth (BW)

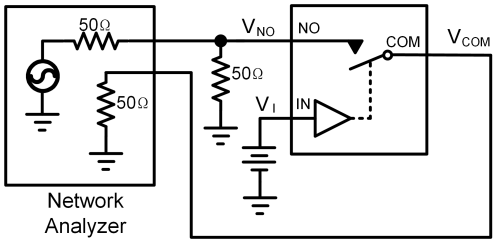


Figure 18. Off Isolation (O_{ISO})

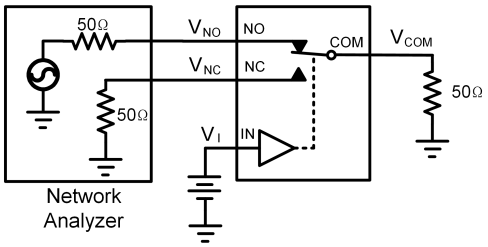


Figure 19. Crosstalk (X_{TALK})

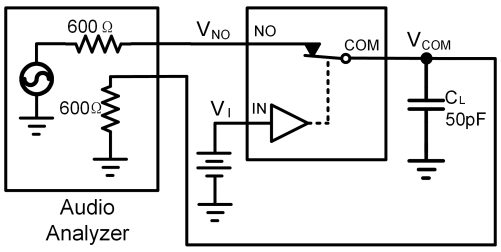


Figure 20. Total Harmonic Distortion (THD)

Detailed Description

Overview

The TPW3625-S is a 6-channel, 1:2 multiplexer/demultiplexer designed to operate from 2 V to 5.5 V. This device is capable of processing both digital and analog signals, allowing for bidirectional signal transmission up to V_{CC}. The TPW3625-S has two control pins, each controlling three 1:2 multiplexers. Additionally, a single enable pin can put all outputs in high-impedance mode. The control pins are compatible with a 1.8-V logic threshold, and are also backward compatible with 2.5-V and 3.3-V logic thresholds.

Functional Block Diagram

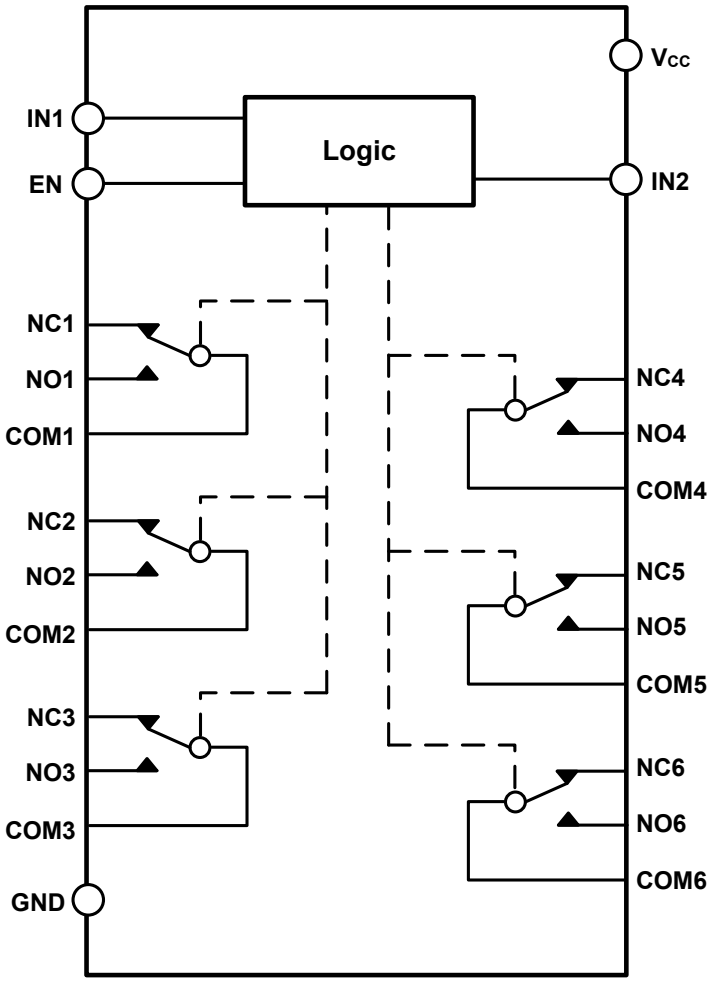


Figure 21. Functional Block Diagram

Application and Implementation

Note

Information in the following application sections is not part of the 3PEAK's component specification and 3PEAK does not warrant its accuracy or completeness. 3PEAK's customers are responsible for determining suitability of components for their purposes. Customers should validate and test their design implementation to confirm system functionality.

Application Information

A 0.1-μF bypass capacitor on V_{CC} and GND is recommended to prevent power disturbance.

Typical Application

The switches are bidirectional, so the NO, NC, and COM pins can be used as either inputs or outputs. This functionality allows port expansion to support many different types of bidirectional signal interfaces such as SD, SDIO, GPIO, MMC, and qSPI.

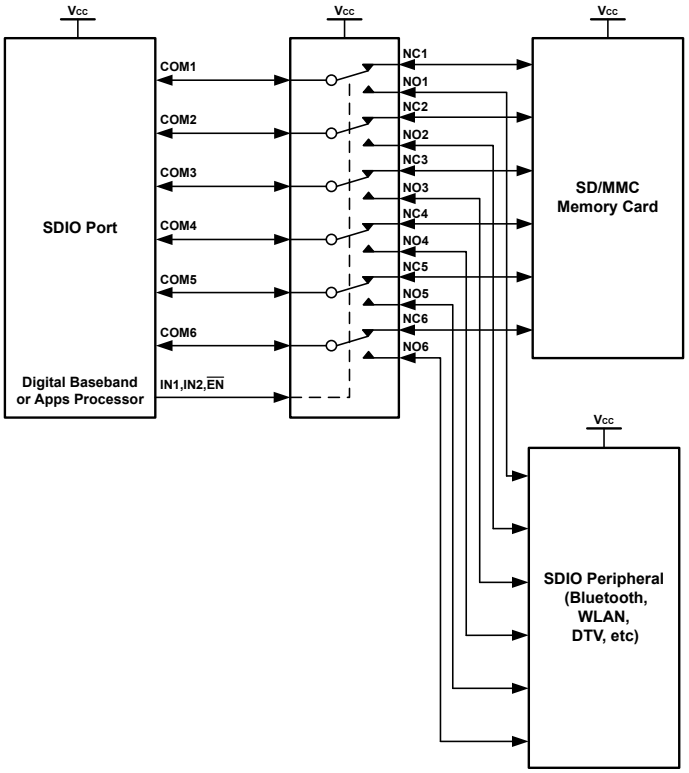
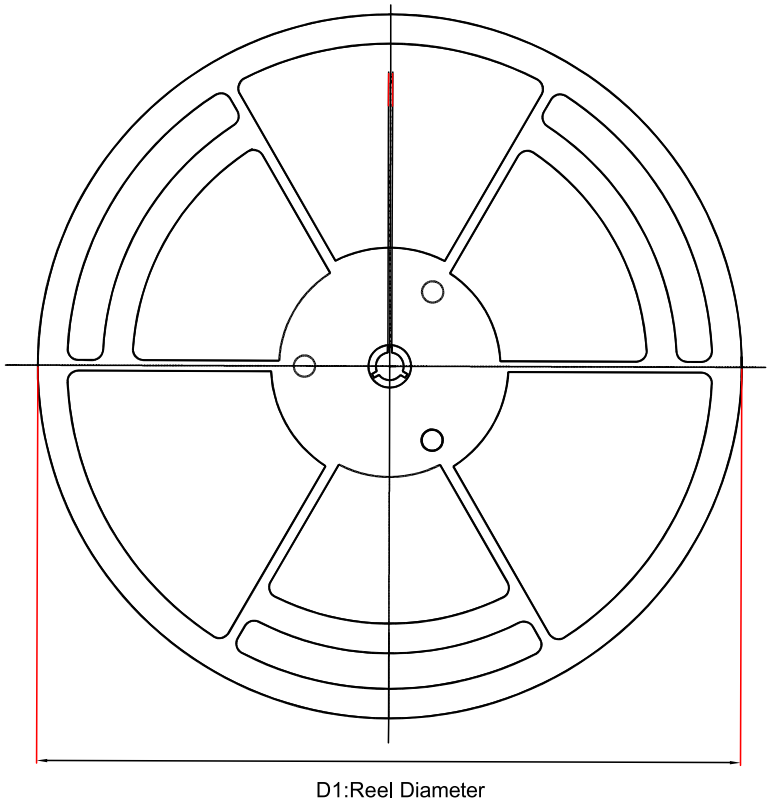
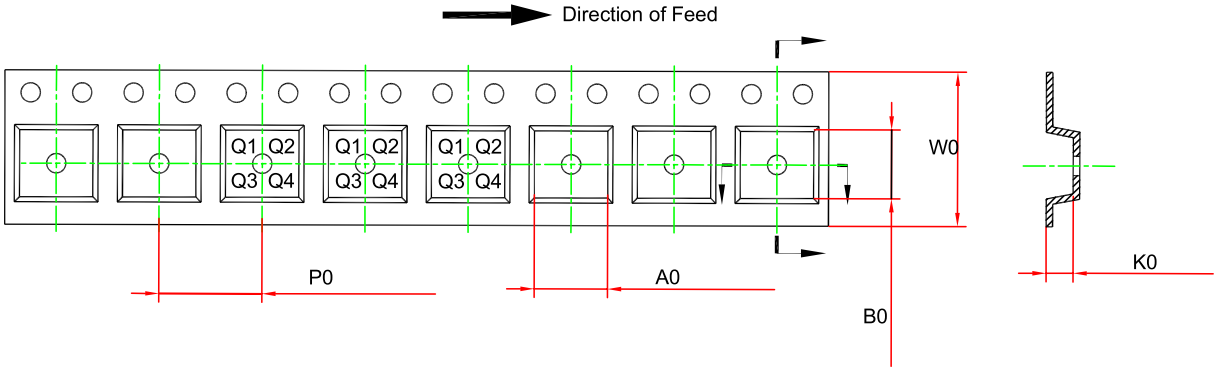


Figure 22. Typical Application Circuit

Tape and Reel Information





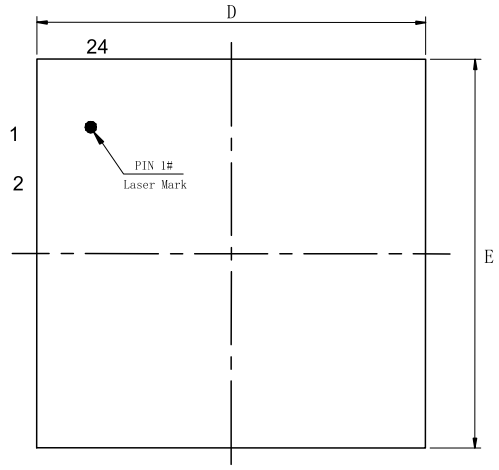
Order Number	Package	D1 (mm)	W1 (mm)	A0 (mm) (1)	B0 (mm) (1)	K0 (mm) (1)	P0 (mm)	W0 (mm)	Pin1 Quadrant
TPW3625-FE2R-S	QFN4X4-24	330	17.6	4.3	4.3	1.1	8	12	Q1

(1) The value is for reference only. Contact the 3PEAK factory for more information.

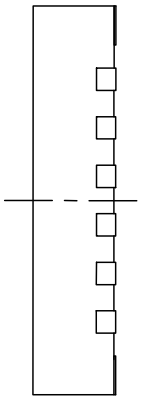
Package Outline Dimensions

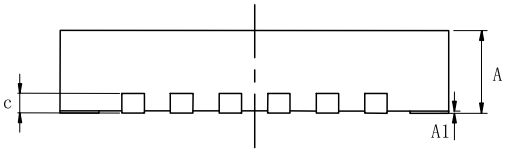
QFN4X4-24

Package Outline Dimensions FE2(QFN4X4-24-F)

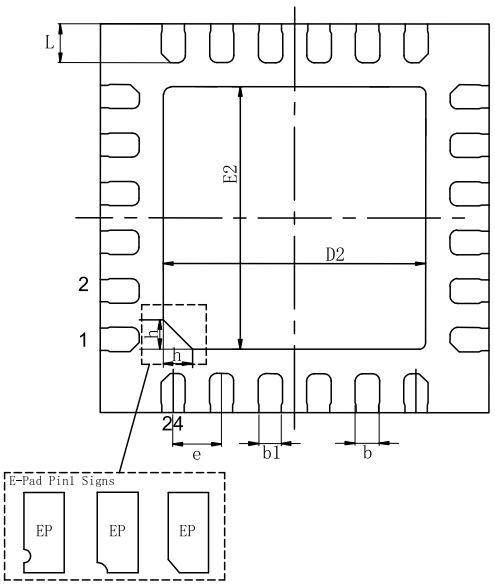


TOP VIEW





SIDE VIEW



BOTTOM VIEW

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN	MAX	MIN	MAX
A	0.800	0.900	0.031	0.035
A1	0.000	0.050	0.000	0.002
b	0.180	0.300	0.007	0.012
b1	0.230 REF		0.009 REF	
c	0.203 REF		0.008 REF	
D	3.900	4.100	0.154	0.161
E	3.900	4.100	0.154	0.161
e	0.500 BSC		0.020 BSC	
L	0.280	0.480	0.011	0.019
D2	2.600	2.800	0.102	0.110
E2	2.600	2.800	0.102	0.110
h	0.250	0.350	0.010	0.014

NOTES

1. Do not include mold flash or protrusion.
2. This drawing is subject to change without notice.
3. The many types of E-pad Pin1 signs may appear in the product.

Order Information

Order Number	Operating Temperature Range	Package	Marking Information	MSL	Transport Media, Quantity	Eco Plan
TPW3625-FE2R-S	–40℃ to +85℃	QFN4X4-24	Q1245	MSL3	Tape and Reel,3000	Green

Green: 3PEAK defines "Green" to mean RoHS compatible and free of halogen substances.

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Performance Information. Performance tests or performance range contained in this document/material are either results of design simulation or actual tests conducted under designated testing environment. Any variation in testing environment or simulation environment, including but not limited to testing method, testing process or testing temperature, may affect actual performance of the product.

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