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# FPF3488 SIDO Over-Voltage Protection Load Switch

## Features

- Single Input Dual Output (SIDO) Switch
  - $V_{BUS}$  to  $V_{OUT}$  Path
  - $V_{BUS}$  to SYS Path
- Surge Protection under IEC 61000-4-5
  - $V_{BUS}$ :  $\pm 100$  V
- Input Voltage Range
  - $V_{BUS}$ : 2.7 V ~ 13.5 V
- Max. Continuous Current Capability
  - $V_{OUT}$  Path: 3.5 A
  - SYS Path: 6 A
- Ultra Low On-Resistance
  - $V_{OUT}$  Path: Typ. 28 m $\Omega$
  - SYS Path: Typ. 33 m $\Omega$
- Over-Voltage Protection (OVP)
  - $V_{OUT}$  Path: 13.9 V  $\pm 400$  mV
  - SYS Path: 5.25 V  $\pm 250$  mV
- Always ON LDO Output POK for  $V_{BUS}$  Detection and System Power Up without Battery
- Active LOW Control for  $V_{BUS}$  to  $V_{OUT}$  Path
- Active HIGH Control for  $V_{BUS}$  to SYS Path
- Active HIGH Control for Device Shutdown
- CMOS output FLAG for  $V_{BUS}$  to SYS Path
- RCB for  $V_{BUS}$  to SYS Path
- Over-Temperature Protection (OTP)

## Description

The FPF3488 features a Single Input Dual Output (SIDO) power switch, which offers surge protection and Over-Voltage Protection (OVP), to protect downstream components and enhancing overall system robustness.

Channel one ( $V_{BUS}$  to  $V_{OUT}$ ) is an active-low, 28 V/3.5 A rated, power MOSFET switch with an internal clamp supporting  $\pm 100$  V surge protection, fixed OVP at 13.9 V ( $\pm 400$  mV). Channel two ( $V_{BUS}$  to SYS) is a active-high, 6 V/6 A rated, power MOSFET, fixed OVP at 5.25 V ( $\pm 250$  mV) and Reverse Current Blocking (RCB) during its OFF State.

POK is paired with always ON LDO to power downstream devices when  $V_{BUS}$  is greater than 2.7 V, regardless of OVLO, EN1 and EN2 State. This provides system power supply without battery.

The FPF3488 is available in a 28-bump, 1.67 mm x 2.96 mm Wafer-Level Chip-Scale Package (WL-CSP) with 0.4 mm pitch.

## Applications

- Mobile Handsets and Tablets
- Wearable Devices

## Additional Information

*For the full datasheet, please contact a Fairchild Sales Representative.*

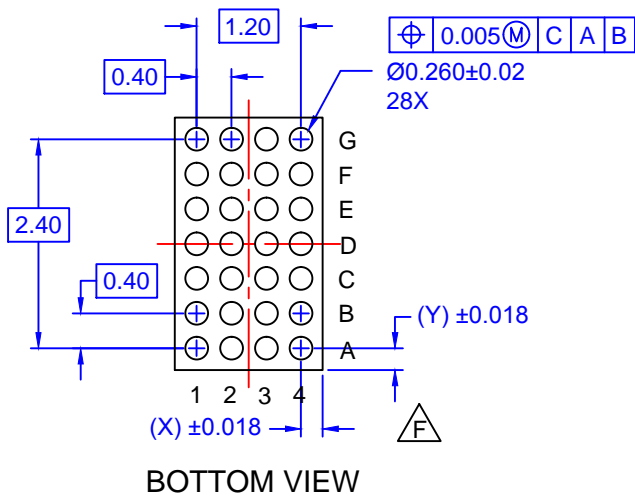
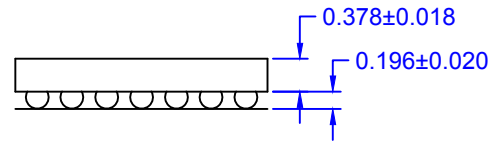
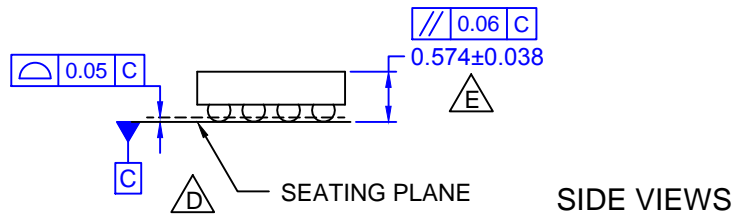
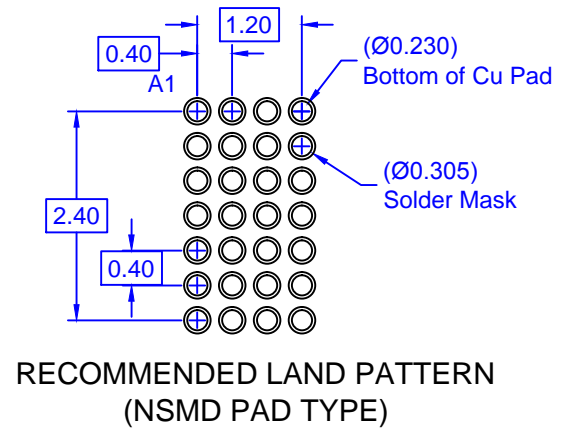
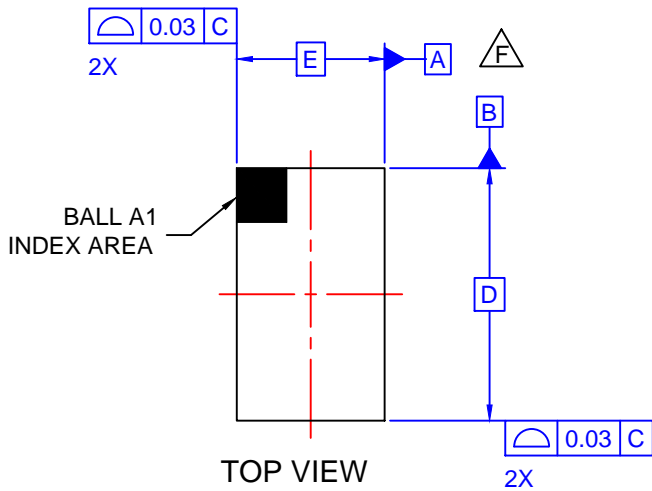
## Ordering Information

Part Number	Operating Temperature Range	Top Mark	Package	Packing Method
FPF3488UCX	-40°C – +85°C	VE	28-Ball, 0.4 mm Pitch WLCSP	Tape & Reel

## Product-Specific Dimensions

*This table applies to the WLCSP package dimensions on the following page.*

D	E	X	Y
2960 $\mu$ m $\pm 30$ $\mu$ m	1670 $\mu$ m $\pm 30$ $\mu$ m	235 $\mu$ m $\pm 18$ $\mu$ m	280 $\mu$ m $\pm 18$ $\mu$ m



- NOTES**
- A. NO JEDEC REGISTRATION APPLIES.
  - B. DIMENSIONS ARE IN MILLIMETERS.
  - C. DIMENSIONS AND TOLERANCE PER ASMEY14.5M, 2009.
  - D. DATUM C IS DEFINED BY THE SPHERICAL CROWNS OF THE BALLS.
  - E. PACKAGE NOMINAL HEIGHT IS 574 ± 38 MICRONS (536-612 MICRONS).
  - F. FOR DIMENSIONS D, E, X, AND Y SEE PRODUCT DATASHEET.
  - G. DRAWING FILENAME: MKT-UC028AB REV1.



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