

OSD62x-PM - TI AM62 Processor + DDR4 SiP

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OSD62x-PM System-In-Package AM62 + DDR4 in a Small Flexible Package

The OSD62-PM System-in-Package (SiP) integrates the Texas Instruments AM62 processor, DDR4 memory, and essential passive components into a compact 9mm x 14mm BGA package. This design simplifies the processor-to-DDR interface, reducing development complexity and time. The OSD62-PM offers the full functionality of the AM62 in a significantly smaller form factor, making it suitable for new, space-constrained applications.

Benefits

Quicker Designs:

The OSD62x-PM simplifies the design process of a high-speed DDR4 interface, providing a reliable starting point and saving months of design time.

▶ ~60% Reduction in Board Area:

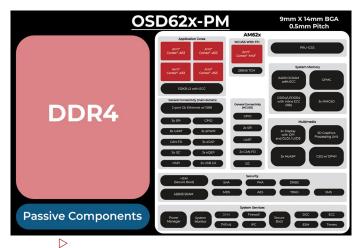
Using 3D SiP technology the OSD62x-PM integrates the AM62, DDR4, and passives into a package the same size as the DDR4 itself, saving surface and routing area.

► Lower Total Cost of Ownership:

Using a SiP reduces engineering design time by up to 9 months, lowers your PCB and assembly costs, simplifies your supply chain, and ensures a more reliable system.

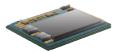
▶ World Class Support:

Access reference designs, application notes, and an active community on octavosystems.com. Additionally, we offer services for reviewing schematics and layouts to maximize the success of first-pass designs.









Technical Specs

- ▶ Integrated into a 9mm X 14mm BGA Package:

 - DDR4
 - Passives

AM62 Features:

- Up to 4x Arm® Cortex®-A53 @1.4GHz
- Arm® Cortex®-M4F
- Display subsystem
 - Supports 2x 1920×1080 @ 60fps
 - OLDI/LVDS (4 lanes 2x) and 24-bit RGB parallel interface
- 3D Graphics Processing Unit
 - Supports up to 2048×1080 @60fps
- OpenGL ES 3.1, Vulkan 1.2
- Access to All AM62 Peripherals Including:

 - - Support for Time Sensitive Networking (TSN)
 - 2x USB2.0 Ports
 - > 9x UART, 5x SPI, 6x I2C, 3x McASP
 - > 3x ePWM, 3x eQEP, 3x eCAP
 - > 3x CAN-FD
 - 1x eMMC, 2x SDIO, 1x GPMC

Package Options:

- 9mm X 14mm (0.35in X 0.55in) 500 Ball BGA
- 0.5mm BGA spacing

▶ Temperature Rating

- > 0° to 85° C case
- → -40° to 85° C case

https://octavosystems.com/octavo_products/osd62x-pm/



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Availability Information

This device is in pre-release. Please contact your Local Octavo Systems Representative for information on the devices

Part Number	TI AM62 Processor	A53 Cores	A53 Speed (MHZ)	M4F Cores	3D GPU	PRU SS	DDR4	Package	Temp Range	Notes
OSD6254-1G-BPM-ES	AM6254	4	1400	1	X	Х	1GB	9mm x 14mm	0° to 85° C	Engineering Samples - Available Summer 2024
OSD6254-1G-BPM	AM6254	4	1400	1	Х	Х	1GB	9mm x 14mm	0° to 85° C	Production Devices – End of 2024
OSD6254-1G-IPM	AM6254	4	1400	1	Х	Х	1GB	9mm x 14mm	-40° to 85° C	Production Devices – End of 2024

Development Tools

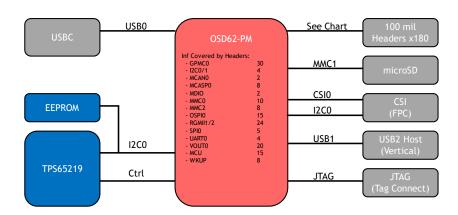
OSD62PM-BRK

Open-Source Flexible Prototyping Platform

The OSD62PM-BRK is a simplified development platform that gives the designer ultimate flexibility. It provides direct access to over 150 of the I/O on the AM62 device. The completely opensource reference design is an ideal starting point for your next project.

- ► Features OSD6254-1G-BPM
- Key Interfaces:

 - CSI
 - ▶ 180x 100mil Headers
- Includes TPS65219 Power Management IC (PMIC)
- ► Completely Open-Source Design



Software Support

The OSD62x-PM System-in-Package Devices are compatible with all software and tools for the AM62. Octavo Systems also provides Opensource Linux BSP's and YOCTO packages to help speed the development of your project using the OSD62x-PM.