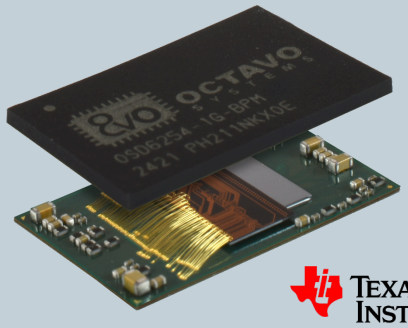
OCTAVO SYSTEMS

OSD62x-PM

AM62 + DDR4 in a Small Flexible Package



TEXAS INSTRUMENTS Design Network

The OSD62x-PM System-in-Package (SiP) integrates the Texas Instruments AM62 processor, memory, and passives into a 9mm x 14mm BGA package — eliminating the most complex part of hardware design. This cuts months from development timelines while delivering the full capability of the AM62 in a fraction of the footprint.

Size Comparison

OSD62x-PM
9x14 mm

US Dime
18 mm Diameter

Benefits

Save Months of Time

Skip months of DDR design, routing, and validation. The OSD62x-PM handles it all out of the package.

Shrink Board Size by 60%

The OSD62x-PM integrates the AM62, DDR4, and passives into a package the same size as the DDR4 itself.

Slash Project Costs

Fewer components, PCB layers, and a pre-validated design mean lower total system cost from prototype to production.

Complete Support

Reference designs, application notes, Import-Ready DDR Tuning Parameters, schematic and layout review services. Everything you need for first-pass design success.

Technical Specs

TI AM62, DDR4, Passives in a 9x14 mm package

AM62 Features:

- Up to 4× Arm® Cortex®-A53 @ 1.4GHz
- Arm® Cortex®-M4F @ 400MHz
- Display Subsystem
  - Supports 2× 1920×1080 @ 60fps
  - OLDI/LVDS (4-lane, 2×) | 24-bit RGB Parallel
- 3D Graphics Processing Unit
  - Supports up to 2048×1080 @ 60fps
  - OpenGL ES 3.1, Vulkan 1.2

Access to All AM62 Peripherals Including:

- MIPI CSI 1.3 Compliant + MIPI-DPHY 1.2
- 10/100/1000 Ethernet Switch w/ TSN Support
- 2× USB 2.0 Ports
- 9× UART, 5× SPI, 6× I2C, 3× McASP
- 3× ePWM, 3× eQEP, 3× eCAP
- 3× CAN-FD
- 1× eMMC, 2× SDIO, 1× GPMC

Package Options:

- 9mm × 14mm (0.35in × 0.55in)
- 500-Ball BGA - 0.5mm BGA Spacing
- x16 DDR4 up to 2GB

Temperature Rating: –40°C to 85°C (Case)

www.octavosystems.com
sales@octavosystems.com

Octavo Systems
2277 Plaza Drive
Sugar Land, TX 77479 - USA

OSD62x-PM

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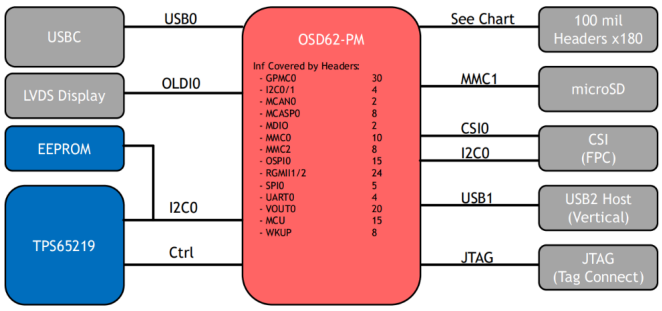
OSD62-PM-BRK

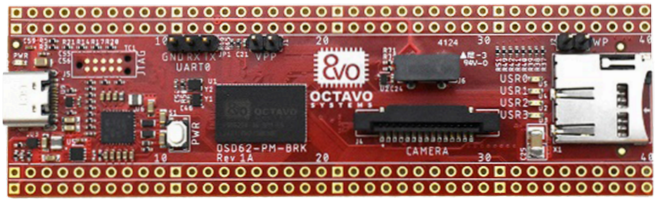
Open Source Development Platform for the OSD62x-PM

The OSD62-PM-BRK gives designers direct access to over 150 AM62 I/O in a flexible, completely open-source development platform — an ideal starting point for your next design.

Features the OSD6254-1G-BPM

- Flexible I/O: Two 2×40 100mil (2.54mm) Headers
- Key Interfaces:
  - µSD Card
  - USB-C
  - CSI
  - LVDS
  - 2x ADC121
  - 2x MikroE Click Board Compatible Headers
  - 4 Layer Single Sided SMT (Except for LVDS)
- TPS65219 Power Management IC (PMIC)
- Completely Open-Source Design





Software Support

Octavo Systems provides Open Source BSP for OSD62-PM-BRK with Processor SDK support, Arago Project (Yocto) compatible meta layers and Beagleboard.org Debian Distro to help jump start your software development using OSD62x-PM.

Contact and Ordering Information

Now in full production and available through all distribution partners. For larger quantities or other inquiries, contact Octavo Systems directly to speak with a representative.

Part Number	TI AM62 CPU	A53 Cores	A53 Speed	M4F Cores	3D GPU	PRU SS	DDR4	Package	Temp Range
OSD6254 -1G-IPM	AM6254	4	1400 MHz.	1	X	X	1GB	9mm × 14mm	-40° to 85°C

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www.octavosystems.com

sales@octavosystems.com

Octavo Systems
2277 Plaza Drive
Sugar Land, TX 77479 - USA