

NEWSPACE MARKET · COMPANY PROFILE



Akash Systems

United States · akashsystems.com

5

PRODUCTS

newspacemarket.com/companies/akash-systems/

as of 26 August 2026

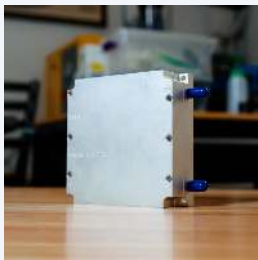
A large, faint, dark blue circular graphic on the right side of the page, consisting of concentric arcs and a central circle, resembling a stylized eye or a target.

Akash Systems

Akash Systems was founded in 2017 in Emeryville, California, by Dr. Felix Ejeckam and Dr. Ty Mitchell, pioneers of GaN-on-Diamond semiconductor technology. The company's core innovation — Diamond Cooling® — replaces conventional silicon carbide substrates with synthetic diamond, dramatically improving thermal conductivity and enabling power amplifiers and radios to operate at higher power levels with smaller form factors. In the space segment, Akash Systems offers the Akash CubeSat Radio, which achieves downlink data rates of up to 700 Mbps in a $10 \times 10 \times 3$ cm package consuming under 28 W — claiming 3–5× higher throughput and approximately 50% lower energy use versus competing solutions. The company also produces space-grade power amplifiers whose thermal management relies on Diamond Cooling® to survive the vacuum thermal environment. Akash Systems is backed by Khosla Ventures and Founders Fund and was recognised as a World Economic Forum Technology Pioneer in 2021. Beyond space, the company applies the same Diamond Cooling® platform to AI data-centre servers and automotive radar.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

Product catalogue



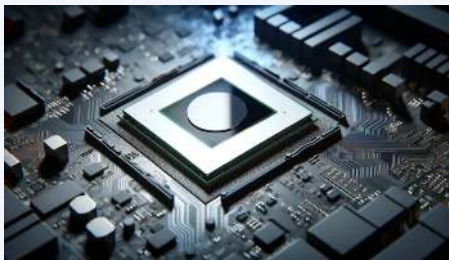
AKASH SYSTEMS

Akash Satellite Radio

A compact satellite radio from Akash Systems that uses Diamond Cooling® technology to deliver gigabit-speed data transmission with high energy efficiency and reliability for space

Downlink data rate	700 Mbps, extendable up to 1.4 Gbps
Form factor	10 cm x 10 cm x 3 cm
DC power consumption	Under 28 W
Modulation	Flexible modulation and coding scheme
Thermal management	Diamond Cooling
Vendor comparison - data rates	3-5x
Vendor comparison - size	50% smaller

price on request



AKASH SYSTEMS

Chip on Diamond

Akash Systems' Chips-on-Diamond integrates the extreme thermal conductivity of diamond with essential computing components like GPUs, CPUs, and Memory, significantly cutting coolin

Temperature Reduction (GPU-on-Diamond)	~60%
Compute Increase	2-4x more
Energy Reduction	~40%

price on request



AKASH SYSTEMS

Diamond-Cooled SERVERS

Akash's Diamond Cooled Servers drastically reduce GPU temperatures with Diamond Cooling® technology, providing thermal headroom for performance optimization.

GPU temperature reduction	10°C
Token throughput improvement	15%
Additional FLOPs/watt	22%
Operational inlet temperature	120°F
Power to cooling	100% LESS

price on request

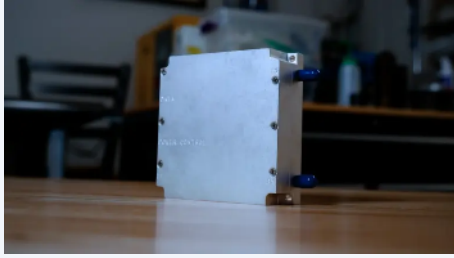


AKASH SYSTEMS

GPU on Diamond

Experience exponentially increased compute, lower failure rates, and less energy consumption with Diamond Cooling for GPUs.

price on request



AKASH SYSTEMS

X/S-Band High-Speed LEO Radio

X/S-Band High-Speed LEO Radio transmits data at 650 Mbps for Earth observation and sensing applications.

Data Rate	650 Mbps
Bandwidth	120 MHz
Transmit Frequency	8-8.4 GHz
Receive Frequency	2.0-2.1 GHz
Power Consumption (DC)	less than 25 W
RF Output Power	2-5 W

price on request

Contact Akash Systems

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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<https://akashsystems.com>

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