

India targeting manufacture of small chips of 2-3 nm by 2032, says Vaishnaw

GAINING MOMENTUM. 'Startup-led chip design and manufacturing drive India's semicon ambitions forward'

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New Delhi

The Centre is targeting the production of high-tech small chips at the 2-3 nanometer (nm) node, used in products such as smartphones, defence equipment and computers by 2032, Ashwini Vaishnaw, Minister of Electronics and Information Technology, said on Tuesday.

SECTOR FOCUS

He said that the government will focus on six chip categories — compute, radio frequency, networking, power, sensor and memory — under the second phase of the Design Linked Incentive (DLI) Scheme, where Indian companies would have major control in developing 70-75 per cent of technology products.

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we can manufacture 70-75 per cent of all the major defence, consumer electronics, industrial electronics and the critical other applications we need. And, as we move towards 2029, when Semicon 2.0 matures, India will become a major player in the semiconductor industry. We have also mapped out the path from 28 nm to 7 nm to 3 nm to 2 nm," he told the me-



dia here on the sidelines of an event.

He said the government had studied the semiconductor journeys of Taiwan, Japan, South Korea and other countries, and with the talent base in India, the country had charted its path towards 2 nm technology in the coming years.

"By 2035, the entire world now believe that India will be

among the most important nations globally," Vaishnaw added.

CHIP START-UPS

He informed that 24 chip design firms had been selected under the DLI Scheme of Semicon India, many of which had already completed tape-outs, validated products and gained market traction.

He noted that start-ups supported under the scheme had attracted nearly ₹430 crore in venture capital funding, reflecting growing confidence in India's chip design ecosystem.

He noted that out of the 24 start-ups participating in the DLI programme, 14 had secured venture capital funding, adding that the India Semiconductor Mission, launched four years ago, had delivered strong outcomes, including 10 projects under construction, four projects

expected to begin production this year, and 67,000 students trained in semiconductor chip design across 315 institutions.

DESIGN BACKBONE

Vaishnaw said this validated the government's core approach of removing barriers faced by semiconductor start-ups by providing access to advanced design tools, IP libraries, wafer and tape-out support — an architecture of support that is unique globally.

The DLI Scheme aims to accelerate domestic chip design capabilities by supporting start-ups and companies across areas such as system-on-chips (SoCs), telecom, power management, artificial intelligence and Internet of Things, thereby strengthening India's self-reliance in critical semiconductor technologies.