Indian mobile market hit as global semicon industry faces `severe memflation'

India sees shortage of sub 210,000-Z15,000 phones as leading chips manufacturers divert capacities to meet humongous demand for high-bandwidth memory required to support AI infra

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The semiconductor industry globally is experiencing a severe structural `memflation' (inflation caused by memory chips shortage), with skyrocketing prices leading to huge disruptions in price sensitive consumer electronics and mobile phone markets in India, said industry experts.

The key reason is that global wafer and advanced packaging capacities are increasingly being allocated toward high bandwidth memory (HBM) and AI infrastructure due to significantly higher demand and margins. A typical HBM takes 2-3x wafer capacity compared with a conventional DRAM.

This is making availability of conventional DRAM and NAND used in mainstream electronics tighter, according to India Electronics & Semiconductor Association (IESA).

Dynamic Random-Access Memory, or DRAM, is a type of computer memory used in PCs, laptops, and smartphones to temporarily store data that the processor needs to actively use. While NAND is a type of memory storage used in smartphones that retains data even without power.

Industry experts also confirmed that there is a shortage of sub 210,000 to X15,000 phones across the country as leading semiconductor (memory chips) manufacturers are diverting all their energies and production capacities away from standard consumer chips to meet the humongous demand for high-bandwidth memory required to support AI infrastructure.

Off reach: The entry-level smartphone segment is under severe pressure due to rising memory chip costs. B. JOTHI RAMALINGAM

India very vulnerable

B.V. Naidu, a foundational architect in India's semiconductor and Electronics System Design and Manufacturing (ESDM) ecosystem and a former president of IESA, India is extremely vulnerable to memory chip shortage due to its heavy reliance on electronic component imports and a consumer base driven by price elasticity.

"It seems global chip makers are prioritising premium brands such as Apple and Samsung for standard memory allocation, leaving budget brands in India and in other geographies to starve of chip/component supply. This has resulted in a short supply of economy smartphones in India. Also, I was told prices of several brands of cellphones have gone up by at least 15-20%," Mr. Naidu said.

As per IESA, higher DRAM and NAND prices, combined with the shift to AI-enabled applications and larger storage needs, are making the sub 210,000 to nsmo category increasingly difficult to sustain profitably.

"The market is witnessing a structural recalibration toward higher-value devices. That means, phone makers are prioritising premium phone production over entry level phones," explained Ashok Chandak, president, IESA.

Confirming the trend, Rajeev Rajput, Senior Principal Analyst at Gartner, in a recent report said, "Memflation will destroy, or at least delay, non-AI demand into 2028, to varying degrees depending on the application. Technology suppliers should prepare for higher prices during the first half of 2026, followed by persistent but moderating price increases throughout the rest of the year." CIOs and IT leaders should be cautious about signing supply agreements with unfavourable pricing terms that extend beyond 2027, he warned.

Echoing a similar sentiment, Mr. Chandak said while capacity expansion announcements were underway globally, meaningful and substantial relief may take up to another two years because semiconductor capacity creation was highly capital-intensive and time-consuming.

"We expect the market to remain tight through 2026-2027, with gradual normalisation thereafter," he added.

On bill of materials (BOM) pressure and smartphone profitability, Mr. Chandak observed, memory pricing has become one of the biggest cost pressures in smartphone and entry level laptop manufacturing.