

Semiconductors in Uttar Pradesh:

Powering India's Digital Future



Introduction:

In the global race to secure self-reliance in semiconductor manufacturing, India is stepping up with bold ambition and at the heart of this transformation is Uttar Pradesh, India's most populous state, now emerging as a promising **semiconductor hub**. Backed by strong policy support, cutting-edge infrastructure and a vision to become a digital powerhouse, Uttar Pradesh is fast becoming the epicenter of India's **semiconductor** (https://invest.up.gov.in/semiconductor-sector/) ambitions.

India is poised to become a global semiconductor hub, with the market expected to grow at a **CAGR** of ~20% over the next decade and contribute ~17% to the global market. (https://invest.up.gov.in/semiconductor-sector/)

India's Semiconductor Landscape: A Snapshot

Despite its booming tech industry, India imported nearly 91% of its semiconductor components in 2021. However, by 2026 local sourcing is projected to rise to 17%, fuelled by government initiatives and increasing investments. Notably, **80% of the revenue** in India's semiconductor sector is currently driven by mobile phones, smart wearables, IT hardware and industrial components.



Investor-Centric Incentives & Support

https://invest.up.gov.in/uttar-pradesh-semiconductor-policy-2024/)

Uttar Pradesh is creating a highly attractive investment climate with a wide array of industry-leading incentives for global and domestic players. State is offering **unprecedented incentives** like:

Major Fiscal Benefits for Semiconductor Units

- Capital Subsidy: 50% additional capital subsidy on the subsidy approved by the Government of India.
- Interest Subsidy: 5% interest subsidy per annum for units with investment up to ₹200 Cr, maximum ₹1 Cr per unit annually for 7 years.
- Stamp Duty & Registration fees Exemption: 100% exemption on stamp duty for land purchase or lease.
- Electricity Duty Exemption: 100% exemption on electricity duty for 10 years.
- **Dual Power Grid Network:** FAB units will be provided a dual power grid network; one grid's cost (lower of the two) reimbursed by the Department of IT & Electronics.
- Transmission & Wheeling Charges Exemption: 50% exemption on wheeling and transmission charges for intrastate power purchases for 25 years from the project's commissioning date.
- **Skilling & Training Support** Up to INR 60 lakhs pa for 5 years for faculty training, technical workshops, awareness programs, and expert lectures (total of INR 3 crore).
- Standalone R&D Centre: Reimbursement of 25% of the cost for setting up an R&D centre, subject to a maximum of ₹10 Crore.
- Centre of Excellence (CoE): 50% subsidy on the total CoE project cost, up to ₹10 Crore, for collaboration with reputed academic institutions or industry associations.
- Patent Registration Fees: 75% reimbursement of domestic patent registration fees (max ₹10 lakh), and international patents (max ₹20 lakh).
- Industrial Housing: 10% of the development cost for workers' housing or dormitories, up to ₹10 Crore, within 10 km of the unit's premises.

Major Non-Fiscal Benefits for Semiconductor Units

- Water Availability: Good quality potable water will be provided for all projects.
- **Power Banking:** Power banking for renewable/green energy provided, governed by Electricity Regulatory Commission (ERC) guidelines.
- Non-Disturbance Provision: Ensures business continuity with a non-disturbance provision.
- Three Shift Operations: 24x7 operations allowed, with employment of women in all shifts, subject to safety and security precautions







Jewar Airport is set to become one of the largest airports in India, being developed under the PPP model by Noida International Airport Limited (NAIL) in collaboration with Zurich Airport. Spanning over 5,000 hectares, the airport is designed to handle 50 million passengers annually. It is also poised to become a major economic catalyst with a ₹1,800 crore MRO and Cargo Hub, and an upcoming Aerotropolis that will position Uttar Pradesh as a global aviation and logistics hub by 2023.

Investment Opportunities in Uttar Pradesh

For investors, innovators and manufacturers looking to tap into **India's semiconductor revolution**, Uttar Pradesh offers the perfect Launchpad. Uttar Pradesh is laying the groundwork to become a complete semiconductor ecosystem, from design to manufacturing and downstream applications. Key areas of investment include:

1. Electronics Manufacturing Clusters (EMCs) Scheme

Three dedicated EMCs are under development, with focus areas like:

Mobile manufacturing

Drones and robotics

Semiconductor fabrication plants (FAB) and defence electronics

IoT (Internet of Things) and consumer durables

2. Semiconductor Design & Development

Embedded software development



VLSI (Very Large Scale Integration) design

Board/hardware design

3. Semiconductor Manufacturing

Located within ESDM and Auto hubs

Supported by infrastructure for ancillary & downstream industries

Ancillary industries: Metals, chemicals, polymer processing

Downstream sectors: Consumer electronics, automotive, aerospace

Uttar Pradesh's Competitive Edge

As one of the largest exporters of consumer electronics in India, Uttar Pradesh already has a strong foundation in the electronics ecosystem. Now, with dedicated initiatives and robust infrastructure, the state is positioning itself as a **key player** in semiconductor design, manufacturing and R&D.

Key Advantages of Uttar Pradesh:

UP Electronic Manufacturing Policy

2022 (https://invest.up.gov.in/?s=UPEM+Policy+2022&dynsearch=v1):

The Uttar Pradesh Electronics Manufacturing Policy offers a comprehensive suite of incentives, including:

- Land allotment at concessional rates
- Infrastructure support for power, water, and connectivity
- Skill development programs aligned with industry needs
- **Strategic Location:** Excellent connectivity through seaports and airports, including the upcoming Jewar International Airport, facilitates smooth import/export operations.
- World-class Infrastructure: 24x7 power supply and uninterrupted Reliable access to clean
 water is essential for industries like manufacturing, food processing, and pharmaceuticals,
 ensuring smooth production processes, maintaining quality standards, and preventing
 operational disruptions.
- <u>Talent Pool</u>: Uttar Pradesh places a strong emphasis on technical education and industryrelevant training through institutions like IITs, ITIs, and IIMs, along with workshops and centers of excellence, ensuring a highly skilled workforce ready for the demands of modern industries.
- **Research & Innovation**: Support for technology upgradation, product development and collaboration with industry associations to foster innovation.

Conclusion



With a clear vision, robust policy support, and a thriving electronics manufacturing (https://invest.up.gov.in/electronics-technology/) base, Uttar Pradesh is scripting a new chapter in India's semiconductor story. As global supply chains shift and the world looks for reliable alternatives to traditional chip-making nations, Uttar Pradesh offers a compelling, investor-friendly environment to tap into the next wave of semiconductor innovation.

If you're looking to invest in India's booming semiconductor sector, Uttar Pradesh is where opportunity meets execution.

To know more about other sector policies click (https://invest.up.gov.in/policies/)

To know more about Invest UP click (https://invest.up.gov.in/)

To know more about Semiconductor Sector click (https://invest.up.gov.in/semiconductor-sector/)

Uttar Pradesh is not just building chips; it's building the Nation's future
