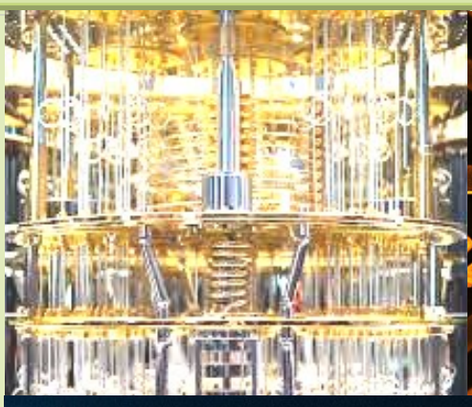
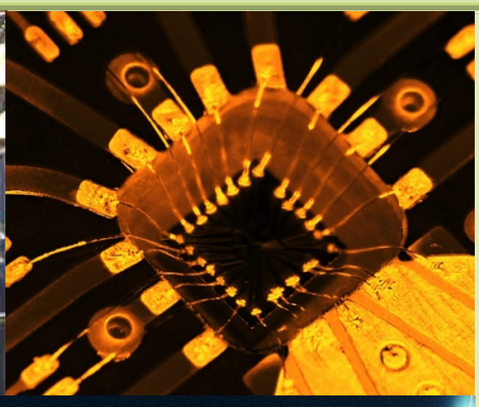
GREATER KARNAVATI QUANTUM COMPUTING TECHNOLOGY PARK- 'GKQCTP', GUJARAT, INDIA





A Snap Shot of Proposed 'GKQCTP' Project

Greater Karnavati Quantum Computing Technology Park (GKQCTP) is first proposed Quantum Computing Technology Park of India, which is planned to get established at Gandhinagar-Dholera SIR, Gujarat. Research firm Innogress submitted its proposal to state Govt. of Gujarat for promoting SPV (Special Purpose Vehicle) for GKQCTP project with an intent to develop and operate this Quantum Computing Technology Pak at Gandhinagar-Dholera SIR , Gujarat in collaboration with various Tech. industry players and strategic investors under special MoU with state Govt. of Gujarat creating common infrastructure for setting up R&D to Design to Simulation to Manufacturing to Testing to Assembling/Packaging facilities and other Engineering and value added serviced around Quantum Computing and Tech.

Objective of 'GKQCTP' Project

To make India an early leader in Quantum Computing (QC) and Quantum Technology (QT) research, development to manufacturing capabilities by building an integrated QC/QT ecosystem of value $1B+ through a dedicated Tech. Park.

'GKQCTP' Project Scope

Tech. Park to be developed in 100 Acres of Industrial land for hosting 15 to 20 Tech. firms in Quantum Hardware, Quantum Software, Quantum Measurement and Control, Quantum Communication, Quantum Sensing, Quantum Security and other Quantum Technologies and enabling them by providing accessibility to several proposed world class facilities in the park ecosystem, along with skilling, R&D, marketing, supply chain and financing supports.


News

Innogress to introduce India's first Quantum Computing Tech Park in Gujarat

By CRN Team - December 28, 2021

CRN India

media press


PUBLISHED ON DECEMBER 28, 2021 IN NEWS

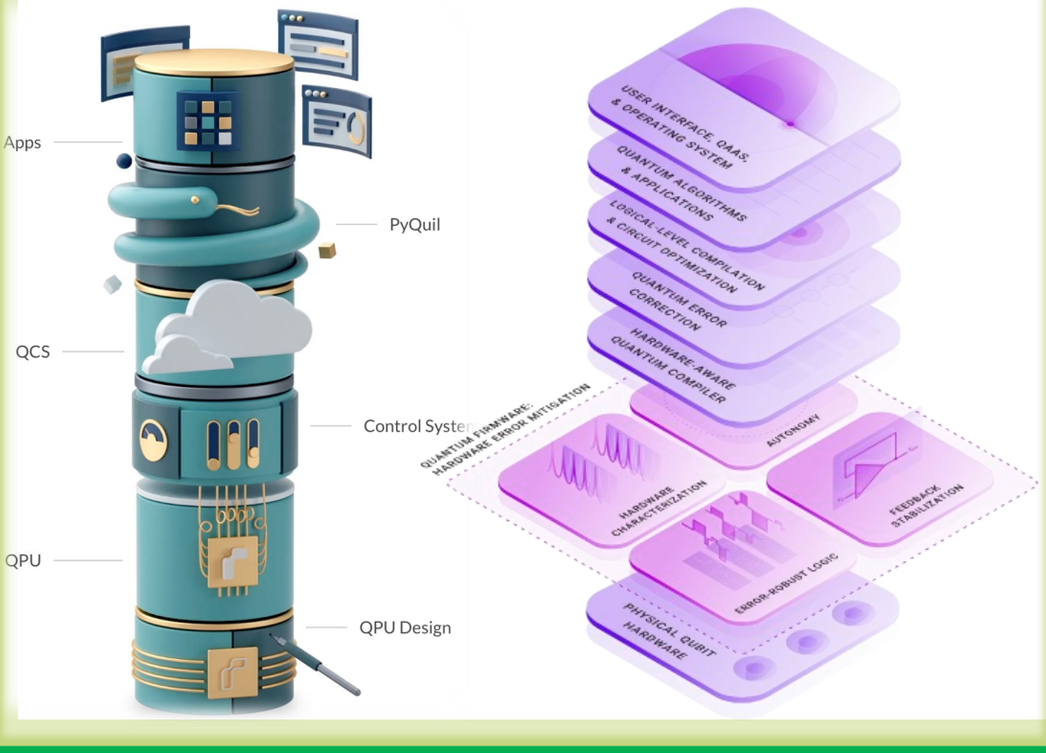
PIM

India's 1st quantum computing tech park to come in Gujarat

Proposed Facilities At 'GKQCTP'

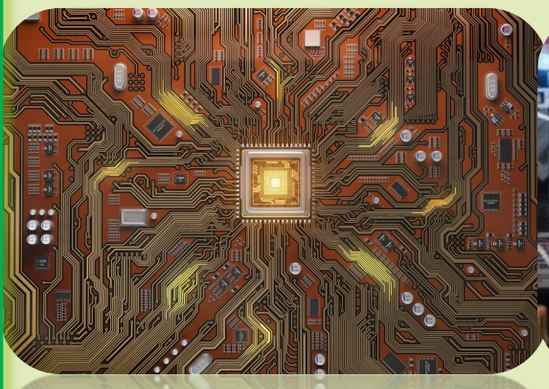
- **Quantum Tech. Materials Processing Center**: Superconducting, Trapped Ions and Photonics Material Science Hub
- **Quantum Tech. R&D Centers**: For Quantum Computing, Quantum Communication, Quantum Sensing & Metrology (Hardware + Software)
- **Quantum Tech. Innovation, Design & Engineering COEs**: For Quantum Chips, Quantum Computers, Quantum Devices, Quantum Sensors, other Quantum Hardware, Quantum Solutions
- **Quantum Tech. Learning Center:** Quantum Computing and Quantum Tech. Training, Skilling and Learning Center
- **Quantum Foundry**: Qubits Manufacturing, Quantum Chip Fabs- Superconductor Chip Fab, Trapped Ions Fab and Silicon Photonic Chip Fab
- **Nano/Micro Fabrication Facilities**: Manufacturing facilities of measurement & control systems and devices that integrate the control systems with the quantum systems, hardware, connectors, wires, cables
- **Quantum Testing Facilities**: Quantum Test Beds, Quantum Testing Services Center, Qubit Testing, QMS (Quality Management System)
- **Quantum Chip Packaging Facility**: Fiber Pigtalling and Packaging Setup, Quantum Stacks Vertical Integration and Packaging
- **Quantum Simulators**: 3D Simulation Laboratory, Quantum Material Simulation, Quantum Network Simulator, Photonic Quantum Simulation
- **Common Cooling Systems**: Dilution Refrigerator, Cooling Pumps, Mixing Chamber
- **Ultra High Vacuum (UHV) Systems:** Sputter ion pump, VacIon ion pumps, TSP (Titanium Sublimation Pump), forevacuum pumps, turbo pumps, turbomolecular pumps, Leak Detectors
- **Quantum Data Center (QDC)**: Quantum Computer Center, Quantum Cloud Services platform (QCS), Quantum and Classical Cloud Integration platforms
- **Quantum Software Development Center**: High Performance Software Stacks and Quantum Artificial Intelligence Development, Quantum Platforms and Tools, Quantum Algorithm Development

At 'GKQCTP' We Are Envisioning To Create Full Stacks of QT/QC



Drivers Of Quantum Tech.- Quantum Computing

- Growing computing resource demand which is getting created by high end Apps. like A.I., Gaming, Metaverse, Scientific Research can be sustained by Quantum Computing Tech.
- Speed and Performance Limitation of Classical Computing
- Higher Computing Speed and Storage potentials of Quantum Tech.
- Quantum Computing going beyond silicon, hence fast emerging as an alternative of silicon semiconductor based classical computing, and global shortages of semiconductors also driving alternative high performance computing tech. like Quantum Computing
- Decarbonization and Energy Efficiency potentials of Quantum Computing, Quantum Sensing, and other Quantum Tech. products
- Two basic Quantum Mechanics properties of superposition and entanglement, which enables unique applications of QT/QC in information security, safe communication, large information storage



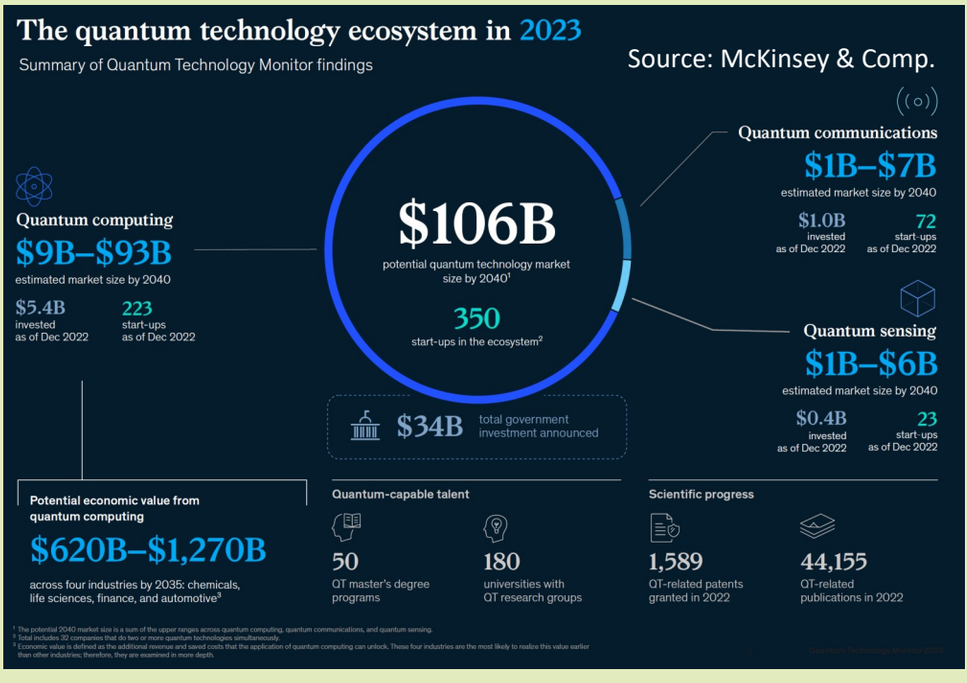
Typical Use Cases To Be Hosted in Proposed 'GKQCTP'

- **Logistics and Supply Chain**: Network Design Planning, Route Planning, Quantum Simulation, Fleet Optimization, Traffic Optimization, Warehouse Optimization, Inventory Allocation, Dynamic Inventory Allocation, De-Carbonization
- **Pharma and Life Sciences**: Discovery and manipulation of molecules, Drug discovery, Molecular simulation, Protein modelling, Genomic sequencing
- **Defense and Security**: Intelligence, Surveillance, and Reconnaissance (ISR), Early Warning and Sensing, Quantum Imaging & Navigation, Cyber Security, Secured Communication, Quantum Cryptography, Quantum Key Distribution
- **Finance and FinTech**: Financial modeling, Quantum algorithms to price financial instruments, Option pricing, Portfolio risk management, Investment portfolio optimization, trade optimization, Anti fraud, Anti money laundering
- **Health Care**: Clinical trial plans & optimization, Precision medicine
- **Clean Tech**: Weather Forecasting, Solar Capture, Solar conversion, New Material Discovery for Energy Efficiency & Cleantech., Better Solar Cells, Better Battery development

Why A Quantum Tech. Park- 'GKQCTP' Is Required In India

- Quantum Tech. & Quantum Computing is going to spur innovations through startups and deep-tech ventures, we need to host these firms in a dedicated park -'GKQCTP' for building integrated Quantum Tech. ecosystem and market place.
- We need to create common infrastructure to absorb partial Capex of Deep Tech. startups and SMEs by building various shared facilities in Tech. park-'GKQCTP' such that startups focuses on innovations and Go-To-Market, rather than building capital intensive high-tech assets for commercializing those innovations.
- We need to build regional Deep Tech. cluster through dedicated Quantum Tech. Park 'GKQCTP' for enabling better financial incentives and policy support from the State Govt. & Central Govt.
- We need tech. park 'GKQCTP' to co-locate QT/QC ecosystem, such that many tech./components gets available locally, reducing sourcing -supply chain costs, and building economy of scale.
- 'GKQCTP' Park ecosystem is for enabling co-located development of full Quantum stack tech./solutions and products in India.
- 'GKQCTP' Park is required for hosting and enabling mission critical use cases of QT/QC of various industry and strategic sectors.
- 'GKQCTP' Project is to attract best FDIs (Foreign Direct Investors).

Market Landscape in Quantum Technology and Computing



According to Quantum Technology Monitor 2023 report of McKinsey, **the global value add by Quantum Computing in four early QC adopting industry verticals viz. Chemicals, BFSI and Automotive combined would be upto $1.3T by 2035**. As per McKinsey, estimated global **QT Market size by 2040 would be upto $106B, in which biggest market share would be of QC, which is estimated up to $93B by 2040.**

As per McKinsey, by 2022 over $40B already invested (includes announced investments) by Pvt. and Govt. enterprises in QC/QT.

As per NASSCOM report, QT in India across industries could potentially add a value upto $310B by 2030.

At Proposed 'Greater Karnavati Quantum Computing Tech. Park' we intend to bring upto $400M investment for park common facilities creation followed by specialized facility creation by participating Tech. firms with total investment potentials of $1B+ over years during project execution .

GREATER KARNAVATI QUANTUM COMPUTING TECHNOLOGY PARK- 'GKQCTP'

Apex Advisory Board of "Greater Karnavati Quantum Computing Technology Park" (GKQCTP)

Our Mentor

Dr. Ajay Dua, Ex-Secretary, Commerce and Industry, Govt. of India, IAS (R) In Board Of Directors of Dabur

Advisor

Mr Jai Shankar Sharma, Sr. Mentor, IIT Kanpur Alumni Association

Advisor

Dr. KR Murali Mohan, Sr. Quantum Scientist and Ex-Mission Director, DST, Govt. Of India

Advisor

Dr. Arun Pati, Quantum Tech. Expert and Ex-Professor, Harish-Chandra Research Institute, Prayagraj

Advisor

Dr. H R Mahadevaswamy, Senior Tech. Industry Leader Joint Director-TED, JSS Mahavidyapeetha, Mysore

Advisor

Dr. Manish Gupta, Quantum Computing Professor, Dhirubhai Ambani Institute of Information & Comm. Tech., Gujarat

Advisor

Mr Paul Nurflus, Chief Revenue Officer (CRO), Tabor Electronics, Israel

Advisor

Dr. Juha Vartiainen, Co-founder and Chief Operating Officer of IQM Finland Quantum Tech. Expert

Advisor

Dr. Nixon Patel, Founder CEO, Qulabs.ai, USA Quantum Tech. Expert

Advisor

Dr. Anupam Singh, Professor of Physics and Dean, I.I.N. Mittal Institute, Jaipur Quantum Science Expert

Advisor

Dr. Anindita Banerjee, Adjunct Scientist, CDAC, Pune, Govt. Of India Quantum Computing Expert

Advisor

Dr. Jayakumar S. Ex- Semiconductor Entrepreneur, Hardware and Computing Expert

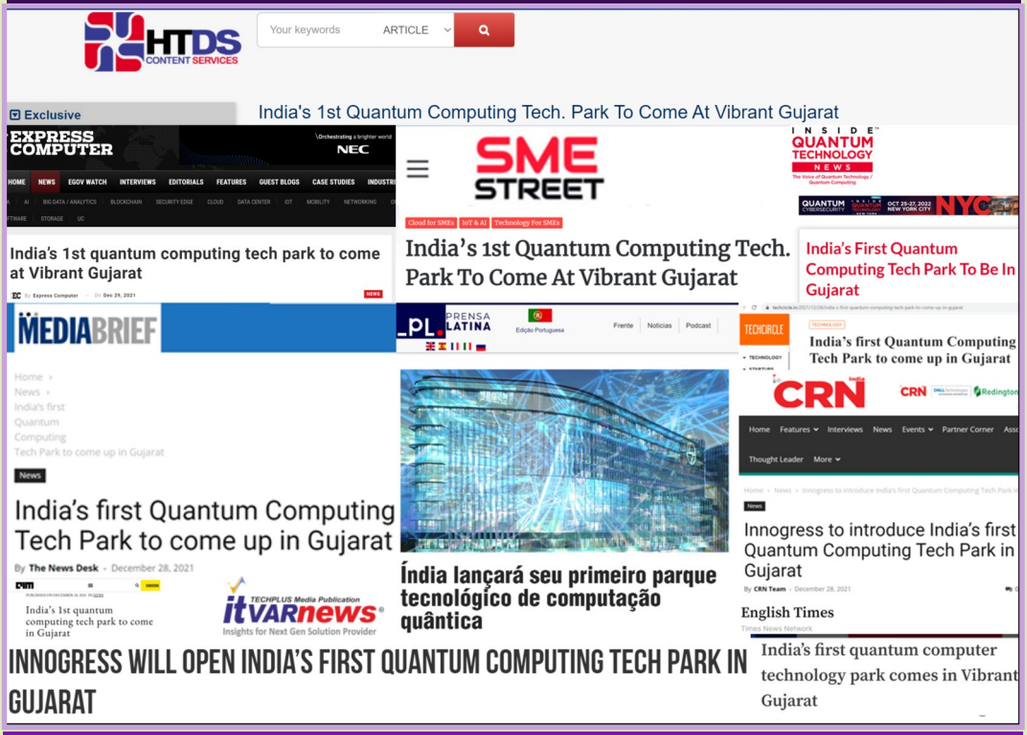
Advisor

Ranjan Kumar Ex- Tata Projects, Computer Science & Project Mgmt. Expert

Members of Honorary Advisory Board of GKQCTP as on 28th Oct. 2023

'GKQCTP' Lead Promoter: Mr Sumant Parimal, Founder of 'Innogress', Globally Recognized, Forbes Featured A.I.-Tech.-Business Leader
E-mail: sumant_parimal@innogress.com
'GKQCTP' Project Website: www.gkqctp.in

Greater Karnavati Quantum Computing Technology Park In News



SME STREET

TRENDS · OPPORTUNITIES · POLICIES · BANKING & FINANCE · INFOCUS · SECTORS · GLOBAL

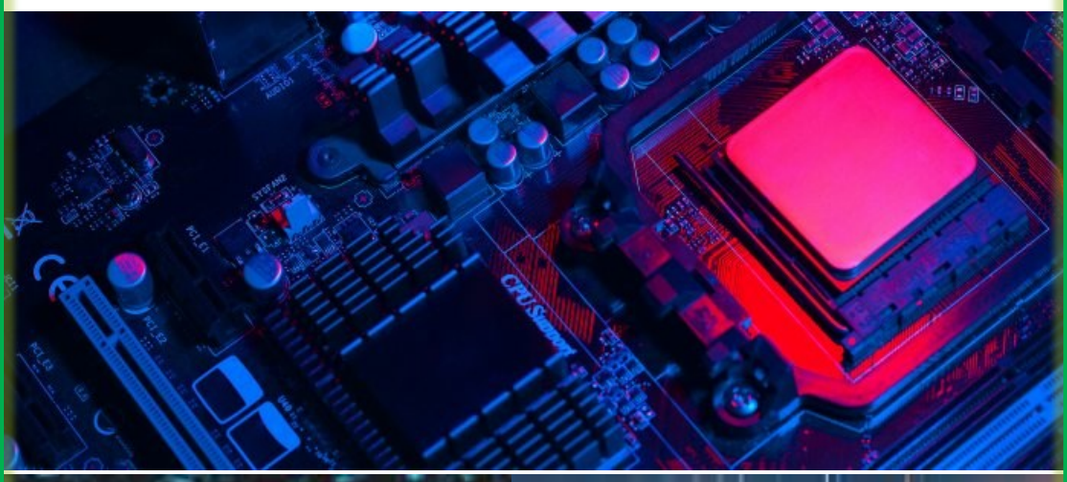
Home / Global / Tabor Becomes First High-Tech Manufacturer To Join Gujarat Based Quantum Computing Tech. Park-'GKQCTP'

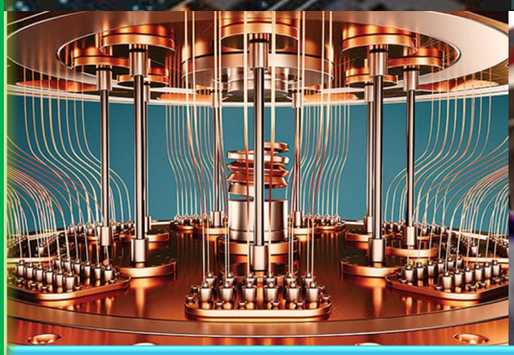
Global · InFocus · Manufacturing · Middle East & Africa

Tabor Becomes First High-Tech Manufacturer To Join Gujarat Based Quantum Computing Tech. Park-'GKQCTP'

In a major thrust to 'Make In India' progg., Haifa, Israel based High-Tech. firm Tabor Electronics becomes first manufacturer in Quantum Tech.

SMEStreet Edit Desk · March 23, 2023 Last Updated: March 23, 2023 · 0 · 3 minutes read





Greater Karnavati Quantum Computing Technology Park (GKQCTP)

India's 1st Tech. Park Dedicated To Quantum Computing and Quantum Technologies
With A Vision to Create $1B+ Quantum Tech. Ecosystem At Gujarat, India

Promoter Innogress Now Seeking Tech. Partnership and PE Funding

Please submit partnership & funding interest on project web site :
www.gkqctp.in or E-mail us on **projects@innogress.com**