

स्वदेशी MICROPROCESSOR **CHALLENGE**  
**RANKLIST OF 30 FINALISTS**

| Rank | Registration Number | Organisation Type     | Organisation Name  | Name of The Team leader      | Processor Type <sup>1,2</sup> | FPGA Board Type <sup>3</sup>            | Project Title   |
|------|---------------------|-----------------------|--|------------------------------|-------------------------------|---|---|
| 1    | 8841823             | Start-up              | SandLogic Technologies Pvt. Ltd, Bangalore                       | Darshan C Ganji              | SHAKTI Vajra (C64-A100)       | Dilgient Nexys Video (Artix-7 XC7A200T) | Bring Deep learning and Computer vision capabilities to Shakti Vajra SoC by adding Neural processing engine, MIPI-CSI2 interface and Video processing pipeline. |
| 2    | 8866873             | Start-up              | Avrio Energy Private Limited,Gurgaon                             | Ankit Chouhan                | VEGA AS1061                   | Artix7-100T                             | Next-generation AI Smart Meter with Energy Intelligence at Edge   |
| 3    | 8808293             | Start-up              | Astrek Innovations, Kannur                                       | Robin Kanattu Thomas         | VEGA ET1031                   | Artix7-35T                              | Rehabilitation Exosuit with Motion transferring Mechanism   |
| 4    | 8865523             | Educational Institute | Rajiv Gandhi University of Knowledge Technologies, East Godavari | Ogireddy Naga Ramya          | SHAKTI Pinaka (E32-A35)       | Artix7-35T                              | SMART IRRIGATION USING FPGA   |
| 5    | 8812513             | Start-up              | Neoperk Technologies Pvt. Ltd.,Thane                             | Satyendra Gupta              | VEGA ET1031                   | Artix7-35T                              | An IoT device for rapid in-situ agricultural soil testing   |
| 6    | 8812453             | Educational Institute | L.D. College Of Engineering, Ahmedabad                           | Rudri Pandya                 | VEGA AS1061                   | Artix7-100T                             | IoT based STP with Remote Water Quality Monitoring Using Data Science and Machine Learning with Wireless Communication Methods between nearby Nodes.            |
| 7    | 8856743             | Start-up              | Evyug Technology Pvt. Ltd. Aurangabad                            | HARITA Uppal                 | SHAKTI Pinaka (E32-A35)       | Artix7-35T                              | Automatic Water Quality Monitoring for Consumers and Enterprises.   |
| 8    | 8294023             | Start-up              | HW Design Labs Pvt Ltd, Kochi                                    | Jayakrishnan A L             | SHAKTI Pinaka (E32-A35)       | Artix7-35T                              | FM RDS Utilities  |
| 9    | 8859673             | Educational Institute | Indian Institute of Technology Indore                            | Gopal R Raut                 | VEGA AS1061                   | Artix7-100T                             | Semi-Autonomous Drones for Terrain Monitoring and Identification of Terrain Modifying Actors  |
| 10   | 8840003             | Others                | Individual Innovator, Bangalore                                  | Sreekanth Nayak              | VEGA ET1031                   | Artix7-35T                              | Affordable and accessible Healthcare solutions  |
| 11   | 8854473             | Others                | MicroX Labs, New Delhi   | Harpreet Singh               | SHAKTI Vajra (C64-A100)       | Kintex7 KC705                           | HomeCyte- At home solution for monitoring infections and internal bleeding in chemotherapy patients   |
| 12   | 8899543             | Others                | Individual Innovator, Gautam Buddha Nagar                        | Soumitra dey                 | SHAKTI Parashu (E32-A100)     | Artix7-100T                             | SWADESHI CUBE SATELLITE (CubeSat) - DESIGN & DEVELOPMENT OF 1U – CubeSatellite ( LoRa based IOT) Callsign : SHAKTISAT-1   |
| 13   | 8807633             | Start-up              | Digi2O Information Solutions Pvt Ltd, Chennai                    | Dipankar Ghosh               | SHAKTI Parashu (E32-A100)     | Artix7-100T                             | DIDA: Digital Information for Diagnostics and Analytics as applied to electrical and electronic circuits of automobile vehicles                                 |
| 14   | 8813713             | Others                | Innovator - Team, Nagpur   | Krunal Rajendra Bhongade     | VEGA ET1031                   | Artix7-35T                              | Automatic Tracking System for Concentrated Reflectors and Photovoltaic Array  |
| 15   | 8856373             | Others                | Sevenkey Technologies Pvt Ltd, Visakhapatnam                     | Venkat Bokka                 | VEGA ET1031                   | Artix7-35T                              | IoT-based low-cost 12-lead precision ECG instrument   |
| 16   | 8859923             | Educational Institute | Vivekanand Education Society Institute of Technology, Thane      | Asma Parveen I Siddavatam    | SHAKTI Parashu (E32-A100)     | Artix7-100T                             | Calibration System for Nuclear Spectroscopy Applications  |
| 17   | 8808013             | Educational Institute | Indian Institute of Technology Hyderabad                         | Rashi Dutt                   | SHAKTI Vajra (C64-A100)       | Artix7-100T                             | IoT oriented Battery Management System for real-time and accurate Battery State and Health Monitoring targeting renewable energy applications.                  |
| 18   | 8815523             | Others                | Individual Innovator, Kangra                                     | Prabhat Thakur               | SHAKTI Pinaka (E32-A35)       | Artix7-35T                              | Multirole UAV for surveillance and small cargo delivery   |
| 19   | 8860793             | Educational Institute | KLE Technological University, Dharwad                            | Saroja V Siddamal            | VEGA ET1031                   | Artix7-35T                              | IoT based Smart Power Monitoring and Controlling Plug   |
| 20   | 8799113             | Others                | Mindgrove Technologies Pvt Ltd, Chennai                          | Sharan Srinivas J            | SHAKTI Vajra (C64-A100)       | Artix7-100T                             | Software-Defined Ground Penetrating Radar   |
| 21   | 8782153             | Start-up              | InstantPost Printers and Scanners Private Limited, Lucknow       | Akhil Mohan                  | VEGA AS1061                   | Artix7-100T                             | AutoMagic   |
| 22   | 8816553             | Educational Institute | Dayananda Sagar College of Engineering, Bangalore                | Chirag Chinvar               | VEGA AS1061                   | Artix7-100T                             | Fleet Monitoring System   |
| 23   | 8156663             | Educational Institute | Shri Ramdeobaba College of Engineering and Management, Nagpur    | Sangeeta Dnyaneshwar Palekar | SHAKTI Parashu (E32-A100)     | Artix7-100T                             | Design and development of SpectroProcessor for Biomedical Applications  |
| 24   | 8863803             | Educational Institute | Vellore Institute of Technology, Chennai                         | Shwetha S                    | SHAKTI Parashu (E32-A100)     | Artix7-100T                             | Wireless Maternal Health Monitoring   |
| 25   | 8861333             | Educational Institute | Visvesvaraya National Institute of Technology, Nashik            | Mayank Bumb                  | SHAKTI Vajra (C64-A100)       | Artix7-100T                             | Anti-Theft GeoFencing based Locking system(ATGLS)   |
| 26   | 8801853             | Start-up              | AiDrone Pvt. Ltd., Pathanamthitta                                | Ani Sam Varghese             | VEGA AS1061                   | Artix7-100T                             | Fault Tolerant Reliable Integrated Avionics System for Drones   |
| 27   | 8817933             | Start-up              | Xfinito Biodesigns Private Limited, Bangalore                    | Nair Siddharth Shivakumar    | VEGA ET1031                   | Artix7-35T                              | A Smart Footwear & Insole System for Preventing Diabetic Foot Ulcer & Support Monitoring Progression of Diabetic Neuropathy                                     |
| 28   | 8896933             | Start-up              | Maitri Innovation Lab, Ambala                                    | Prateek Chopra               | VEGA ET1031                   | ARTIX-35T                               | Digitisation of Water Supply Infrastructure   |
| 29   | 8793013             | Start-up              | RevoH Innovations Pvt Ltd, Chennai                               | Vignesh Durai                | SHAKTI Pinaka (E32-A35)       | Artix7-35T                              | BLDC Controller   |
| 30   | 8838983             | Educational Institute | Faculty of Technology and Engineering, Vadodara                  | Toms Jiji Varghese           | SHAKTI Pinaka (E32-A35)       | Artix7-35T                              | Emerging Technologies   |

1. SHAKTI Processor By IIT Madras

2.VEGA Processor By C-DAC

3. ARTIX7-100T and ARTIX7-35T FPGA Board by Xilinx



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