

# CHALLENGE

## LIST OF 100 SEMI-FINALISTS

Sl No	Registration Number	Name	Project Title	Category	Organization Type	Processor Type	FPGA Board Type
1	7956363	NVik LOGIC SYSTEM	"Navic receiver" using "Swadeshi Microprocessor"	Team	Start-ups	SHAKTI Vajra (C64-A100)	Artix7-100T
2	7962543	Tushar Bhattacharyya	TireIQ - Smart Health Solution for Your Tyre	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
3	8156663	Sangeeta Dnyaneshwar Palekar	Design and development of SpectroProcessor for Biomedical Applications	Team	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
4	8254523	Gopinathan Subramanian	Cinnovator's Smart Vehicle System (SVS)	Team	Start-ups	SHAKTI Vajra (C64-A100)	Artix7-100T
5	8294023	Jayakrishnan A L	FM RDS Utilities	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
6	8781303	Jeyaram	DESIGN AND DEVELOPMENT OF SMART INDOOR AIR QUALITY MONITOR - "SMART IAQM"	Team	Educational Institutes	SHAKTI Pinaka (E32-A35)	Artix7-35T
7	8782153	Akhil Mohan	AutoMagic	Individual	Start-ups	VEGA AS1061	Artix7-100T
8	8782603	Sreehari Krishnakumar	Electronic Scribe for Visually Impaired	Team	Educational Institutes	VEGA AS1061	Artix7-100T
9	8789423	Pranav Srinivas M	Project UWBquitos - enabling Ultra-Wide Band everywhere	Individual	Other	SHAKTI Vajra (C64-A100)	Artix7-100T
10	8793013	Vignesh Durai	BLDC Controller	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
11	8795673	Aravintha Prasath V	Seizure Alert System	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
12	8799113	Sharan Srinivas J	Software-Defined Ground Penetrating Radar	Team	Other	SHAKTI Vajra (C64-A100)	Artix7-100T
13	8799673	aravind hanumanthaiah	Vital Signs Monitor based on Internet of Medical Things	Team	Other	SHAKTI Parashu (E32-A100)	Artix7-100T
14	8800343	Parth Sharma	INDUINO - Indigenous Hindi-Supported Modular IoT Development Platform	Team	Start-ups	VEGA ET1031	Artix7-35T
15	8801233	Prasad Phadke	Electrochemical Workstation for Scientific Research and Teaching	Individual	Other	VEGA ET1031	Artix7-35T
16	8801853	Ani Sam Varghese	Fault Tolerant Reliable Integrated Avionics System for Drones	Team	Start-ups	VEGA AS1061	Artix7-100T
17	8802223	Sakshat Rao	Smart Road Traffic Monitoring and Control System	Team	Educational Institutes	VEGA AS1061	Artix7-100T
18	8807423	Arun Ashok	NAVIC-GNSS baseband processor SoC for Emerging Navigation Solutions	Team	Other	SHAKTI Parashu (E32-A100)	Artix7-100T
19	8807633	Dipankar Ghosh	DIDA: Digital Information for Diagnostics and Analytics as applied to electrical and electronic circuits of automobile vehicles	Team	Start-ups	SHAKTI Parashu (E32-A100)	Artix7-100T
20	8807963	Subhajit Sinha	IoT and AI-Enabled Smart Farm Automation (Hydroponics and Vertical Farming)	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
21	8808013	Rashi Dutt	IoT oriented Battery Management System for real-time and accurate Battery State and Health Monitoring targeting renewable energy applications.	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
22	8808293	Robin Kanattu Thomas	Rehabilitation Exosuit with Motion transferring Mechanism	Individual	Start-ups	VEGA AS1031	Artix7-35T
23	8808603	ANKUSH GHOSH	MARIA (Multiple Applications Robotic Intelligent Assistant) -A Service cum Security Robot	Individual	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
24	8808803	Athul E M	IoT Based Grain Storage Monitoring and AI Based Grain Spoilage Control System	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
25	8810433	vishnu nair	Real-Time Predictive Condition Monitoring System for Ball Mills Used in Cement Manufacturing Industries.	Individual	Other	SHAKTI Vajra (C64-A100)	Artix7-100T
26	8812453	Rudri Pandya	IoT based STP with Remote Water Quality Monitoring Using Data Science and Machine Learning with Wireless Communication Methods between nearby Nodes.	Team	Educational Institutes	VEGA AS1061	Artix7-100T
27	8812513	Satyendra Gupta	An IoT device for rapid in-situ agricultural soil testing	Team	Start-ups	VEGA ET1031	Artix7-35T
28	8813713	Krunal Rajendra Bhongade	Automatic Tracking System for Concentrated Reflectors and Photovoltaic Array	Team	Other	VEGA ET1031	Artix7-35T
29	8814053	Bonfarmo	Sugarcane Bud/Stalk Processing Station	Team	Start-ups	SHAKTI Vajra (C64-A100)	Artix7-100T
30	8815523	Prabhat Thakur	Multirole UAV for surveillance and small cargo delivery	Individual	Other	SHAKTI Pinaka (E32-A35)	Artix7-35T
31	8815623	Dishant Shah	FPGA accelerated remote vital stats monitoring device	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
32	8816553	Chinaz Chinar	Fleet Monitoring System	Team	Educational Institutes	VEGA AS1061	Artix7-100T
33	8817383	KEERTHIPRAKASAM J	"DOCTOR'S APPRENTICE"	Team	Start-ups	VEGA ET1031	Artix7-35T
34	8817623	Ayush Bhardwaj	IoT BASED SMART GLOVES WHEELCHAIR	Team	Educational Institutes	VEGA AS1061	Artix7-100T
35	8817933	Nair Siddharth Shivakumar	A Smart Footwear & Insole System for Preventing Diabetic Foot Ulcer & Support Monitoring Progression of Diabetic Neuropathy	Team	Start-ups	VEGA ET1031	Artix7-35T
36	8818333	Dr Manish Gupte	Audio Compression Algorithms and Hardware for Lecture Compressing and Audio Conference	Individual	Other	VEGA AS4161	Artix7-100T
37	8820113	Yeddula Sandeep Kumar Reddy	"Sensor fusion-based drivability and vehicle performance enhancer"	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
38	8820433	Vermula Jahnvi	TECHNO AGRI LAND-MOVER (FOR MICRO AND SMALL FARMERS' FIELD OPERATIONS)	Team	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
39	8820933	Lekshmi Ajeesh Kaimal	High resolution Multichannel Analyzer for nuclear spectroscopy applications	Team	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
40	8831193	Karthik K Bhat	Autonomous Robot Controller (ARC)	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
41	8836893	Ajit Singh	Antardasya - an industrial automation solution	Team	Other	SHAKTI Vajra (C64-A100)	Artix7-100T
42	8838983	Toms Jiji Varghese	Emerging Technologies	Team	Educational Institutes	SHAKTI Pinaka (E32-A35)	Artix7-35T
43	8839113	Daksh Shende	IoT/IoE based Technology - Use IoT/IoE technology to implement SMART BUILDING technology	Team	Educational Institutes	VEGA ET1031	Artix7-35T
44	8840003	Sreekanth Nayak	Affordable and accessible Healthcare solutions	Individual	Other	VEGA ET1031	Artix7-35T
45	8840933	Manish Harishchandra Tinkhede	"Artificial Intelligent (AI) Gloves for Deaf and Dumb Peoples"	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
46	8841823	Darshan C Ganji	Bring Deep learning and Computer vision capabilities to Shakti Vajra SoC by adding Neural processing engine, MIPI-CS12 interface and Video processing pipeline.	Team	Start-ups	SHAKTI Vajra (C64-A100)	Digilent - Nexys Video Series - Artix7-7 XC7A200T
47	8842153	Tejas S Shah	Non-invasive Measurement of Blood Sugar (NIMBUS)	Team	Other	SHAKTI Parashu (E32-A100)	Artix7-100T
48	8842733	Ashish Bansal	Energy Beamforming for Wireless Information and Power Transfer using shakti processor for IoT Application	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
49	8843073	Shubham Kamthania	Sarvam-Live a portable live streaming device	Team	Start-ups	SHAKTI Vajra (C64-A100)	Artix7-100T
50	8843163	Akash Babu	Micro Level Power Management System using IoT & Machine Learning	Team	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
51	8846483	Shylesh Srinivasan	BATTER-O-MATIC	Team	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
52	8846533	Amogha T S	Agrower	Team	Educational Institutes	VEGA AS1061	Artix100T
53	8847293	Kishore B	IoT/ IoE based technologies: GPS Based Public Address & Passenger Information System	Individual	Start-ups	SHAKTI Vajra (C64-A100)	Artix7-100T
54	8849173	Aditya Nirmale	Industrial Automation using smart Automatic Storage and Retrieval System	Team	Educational Institutes	SHAKTI Pinaka (E32-A35)	Artix7-35T
55	8851863	Nikhilesh Singh	Halcyon: An Indigenous Secure On-board Computing Environment for Unmanned Aerial Vehicles	Team	Other	Shakti Vajra (C64-A100)	Artix7-100T
56	8851943	Kumaraswamy V	Implementing Industrial IoT and Industry 4.0 solutions faster and affordably using a universal data acquisition solution.	Team	Start-ups	SHAKTI Parashu (E32-A100)	Artix7-100T
57	8852053	Bharatdeep Hazarika	SMART Plug N' Play Device for Electric Vehicles	Team	Other	VEGA ET1031	Artix7-35T
58	8852543	Parivesh Choudhary	UAV Object Delivery	Team	Educational Institutes	VEGA AS1061	Artix7-100T
59	8852803	Dr Suresh Dahiya	Shakti microprocessor based IoT devices and infrastructure for e-vehicle charging stations	Individual	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
60	8854473	Harpreet Singh	: HomeCyt- At home solution for monitoring infections and internal bleeding in chemotherapy patients	Team	Other	SHAKTI Vajra (C64-A100)	Xilinx Kintex-7 FPGA KC705 Evaluation Kit along with AD-FMCOMMS1-EBZ FMC Board
61	8856173	Vaishnavi Patil	: IOT Based Automated Medicine Dispensing Machine	Team	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
62	8856373	Venkat Bokka	IoT-based low-cost 12-lead precision ECG instrument	Team	Other	VEGA ET1031	Artix7-35T
63	8856743	HARITA Uppal	Automatic Water Quality Monitoring for Consumers and Enterprises	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
64	8857483	Praveen R	Super Automated Wet Grinder	Team	Educational Institutes	VEGA ET1031	Artix7-35T
65	8857493	Ankur Jain	A Industry 4.0 Platform with integrated AI & Industrial IOT, Solving the problem of Authentication of Quality, Quantity & Traceability in Distributed Food, Agri & Farm Manufacturing & Supply Chain	Individual	Start-ups	VEGA AS1061	Arty A7-100T

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Sl No	Registration Number	Name	Project Title	Category	Organization Type	Processor Type	FPGA Board Type
66	8858213	Khyati Kiyawat	Emergency Distress Response System for Automobiles	Team	Other	SHAKTI Pinaka (E32-A35)	Artix7-35T
67	8858263	Sidhant Dhall	Predictive and adaptive learning methods networked with IoT devices which are developed for non-invasive access to appliances targeting energy analytics-savings and water conservation in a conventional home.	Team	Start-ups	VEGA AS1061	Arty A7-100T
68	8859083	Vishvajitsinh Dharmendrasinh Bakarola	Intelligent Multi-Sensor Street Light System for Smart City Applications	Team	Other	SHAKTI Vajra (C64-A100)	Artix7-100T
69	8859673	Gopal R Raut	Semi-Autonomous Drones for Terrain Monitoring and Identification of Terrain Modifying Actors	Team	Educational Institutes	VEGA AS1061	Artix7-100T
70	8859693	Sanyam Jain	SPHM "Smart Portable Health Monitoring" Device	Team	Educational Institutes	VEGA ET1031	Artix7-35T
71	8859923	Asma Parveen I Siddavatam	Calibration System for Nuclear Spectroscopy Applications	Individual	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
72	8860793	Saroja V Siddamal	IoT based Smart Power Monitoring and Controlling Plug	Team	Educational Institutes	VEGA ET1031	Artix7-35T
73	8861083	Paarth Nilesh Arkadi	Swadeshi Battery Management System	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
74	8861183	Mahesh Kumar Prajapat	Night Patrolling Robot	Team	Start-ups	VEGA AS1061	Artix7-100T
75	8861293	Prabin Kumar Das	A System and Method for Remote Parking Slots Information Access.	Team	Educational Institutes	VEGA ET1031	Artix7-35T
76	8861333	Mayank Bumb	Anti-Theft Geofencing based Locking system(ATGLS)	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
77	8861363	Subhiksha Raj	Waste management	Team	Educational Institutes	SHAKTI Pinaka (E32-A35)	Artix7-35T
78	8861513	KIRTI HEMANT WANJALE	SAND FILTER AUTOMATION WITH AUTO FERTILIZING SYSTEM FOR IRRIGATION USING INTERNET OF THINGS	Individual	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
79	8861913	Manasi Mishra	IoT based Industry Management system	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
80	8862133	Monish Mehmi	IMPLEMENTATION OF SHAKTI PROCESSOR IN CUBE SATELLITE.	Team	Other	SHAKTI Pinaka (E32-A35)	Artix7-35T
81	8862203	Raja J	Modernization Technology based Drag and Drop application for universal Product Design (IoT/IoT Based Technology)	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
82	8862373	Shagnik Pal	DRONE CONTROLLER USING SHAKTI	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
83	8863213	PRAVEEN MATHEW	Edge Computing Module for Image Processing	Team	Start-ups	VEGA AS1061	Artix7-100T
84	8863433	Samhita Varambally B	Edge AI based Agricultural Produce Segregation Chip	Team	Other	SHAKTI Vajra (C64-A100)	Artix7-100T
85	8863803	Shwetha S	Wireless Maternal Health Monitoring	Team	Educational Institutes	SHAKTI Parashu (E32-A100)	Artix7-100T
86	8864623	Arbab Kumar Barman	A Multifunctional Biomimetic Quadruped Robot for Climbing and Walking on Variable Terrain	Team	Start-ups	VEGA ET1031	Artix7-35T
87	8865523	Ogiredy Naga Ramya	SMART IRRIGATION USING FPGA	Team	Educational Institutes	SHAKTI Pinaka (E32-A35)	Artix7-35T
88	8865663	Tamal Mandal	Intelligent Traffic Management System	Team	Educational Institutes	SHAKTI Vajra (C64-A100)	Artix7-100T
89	8866333	vishal natani	IoT Platform for Solar Plant Management and Control	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
90	8866393	Harikrishnan R	ELAS Point Care Wearable IOT with General-Respiratory Augmentation Machine (G-RAM-Mask) & IWatch: Intelligent Wearable Healthcare, IoT/ IoE based technologies	Team	Start-ups	VEGA AS1061	Artix7-100T
91	8866873	Ankit Chouhan	Next-generation AI Smart Meter with Energy Intelligence at Edge	Team	Start-ups	SHAKTI Vajra (C64-A100)	Artix7-100T
92	8878623	Suraj Rajan	A product that provides freedom from being constrained by IV line in Hospital and can also be extended to providing treatment at home.	Team	Start-ups	VEGA ET1031	Artix7-35T
93	8896933	Prateek Chopra	Digitisation of Water Supply Infrastructure	Individual	Start-ups	Vega ET1031	Artix7-35T
94	8899543	soumitra dey	SWADESHI CUBE SATELLITE (CubeSat) - DESIGN & DEVELOPMENT OF 1U - CubeSatellite (LoRa based IOT) Callsign : SHAKTISAT-1	Individual	Other	SHAKTI Parashu (E32-A100)	Artix7-100T
95	8912813	Nettimi Satya Sai Srinivas	A portable healthcare monitoring system for automatic voice pathology detection from speech signals.	Team	Educational Institutes	VEGA AS1061	Artix7-100T
96	8912903	sumant nashik	OLFACT 6T-Automated Rapid Double Blind Smell Test for Large Scale Testing.	Team	Start-ups	VEGA ET1031	Artix7-35T
97	8915783	Srushti Mehatkar	Camera Traps for Wildlife Monitoring and Surveillance in remote areas with Ad Hoc Network	Team	Start-ups	SHAKTI Pinaka (E32-A35)	Artix7-35T
98	8917763	Dhilleswar Rao	Internet-Based Remote Control for Process Automation by Using VEGA/Shakti Microprocessor Based Transceivers	Team	Other	VEGA AS1061	Artix7-100T
99	8918973	ROHIT RAPHAEL	IoT based Utility Management System	Team	Educational Institutes	SHAKTI Pinaka (E32-A35)	Artix7-35T
100	8919853	Mr. Velnati Ravi	Didactic training system for Shakti/Vega for educational market (XPO-EST Shakti/Vega)	Team	Start-ups	SHAKTI Parashu (E32-A100)	Artix7-100T