MINISTRY OF
ELECTRONICS &
INFORMATION TECHNOLOGY
GOVERNMENT OF INDIA

सत्यमेव जयते

सी डैक
CDAC

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

mygov
मेरी सरकार

स्वदेशी

MICROPROCESSOR CHALLENGE

INNOVATE SOLUTIONS FOR #आत्मनिर्भर भारत

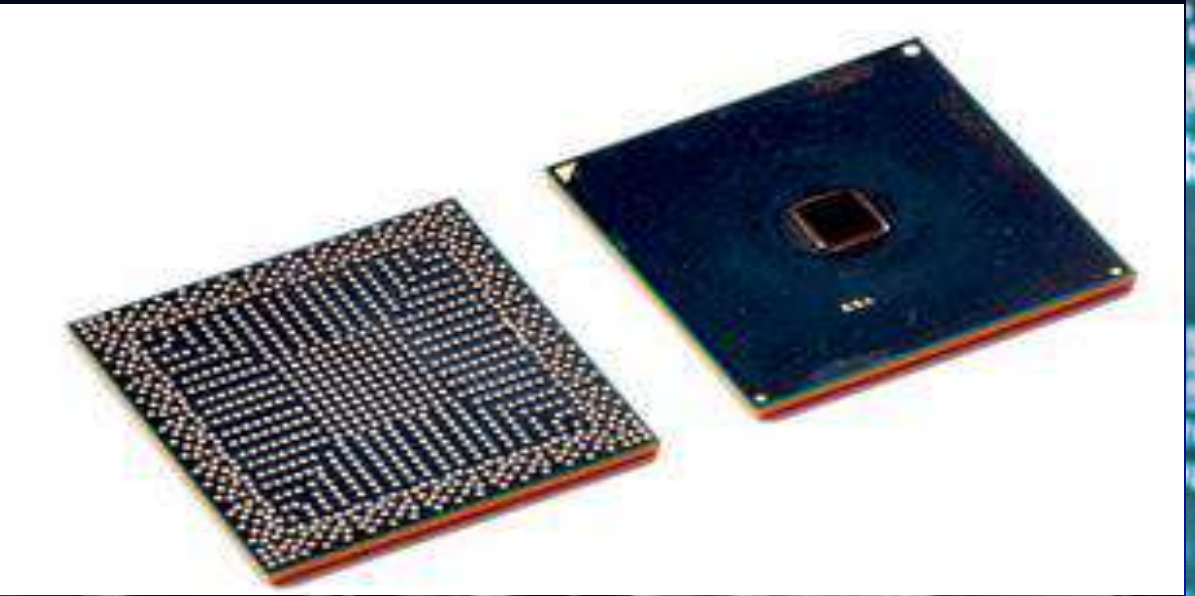
VISIT **INNOVATE.MYGOV.IN**

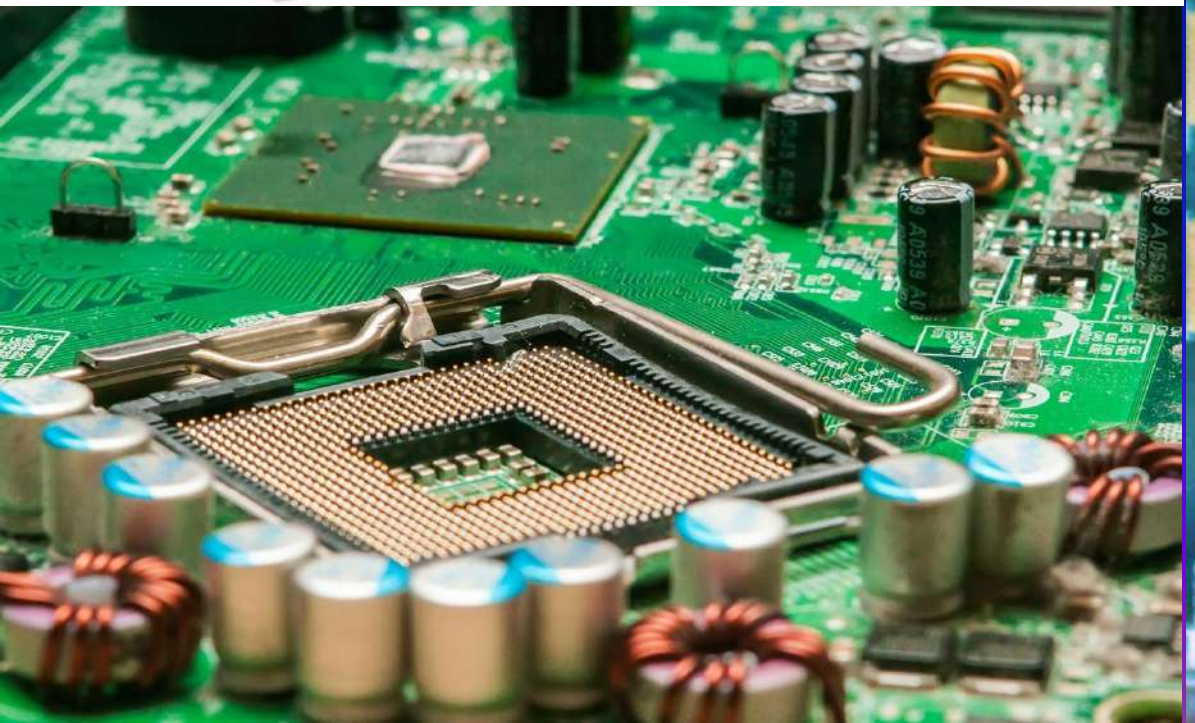
स्वदेशी Microprocessor Challenge

Innovate Solutions for #आत्मनिर्भर भारत

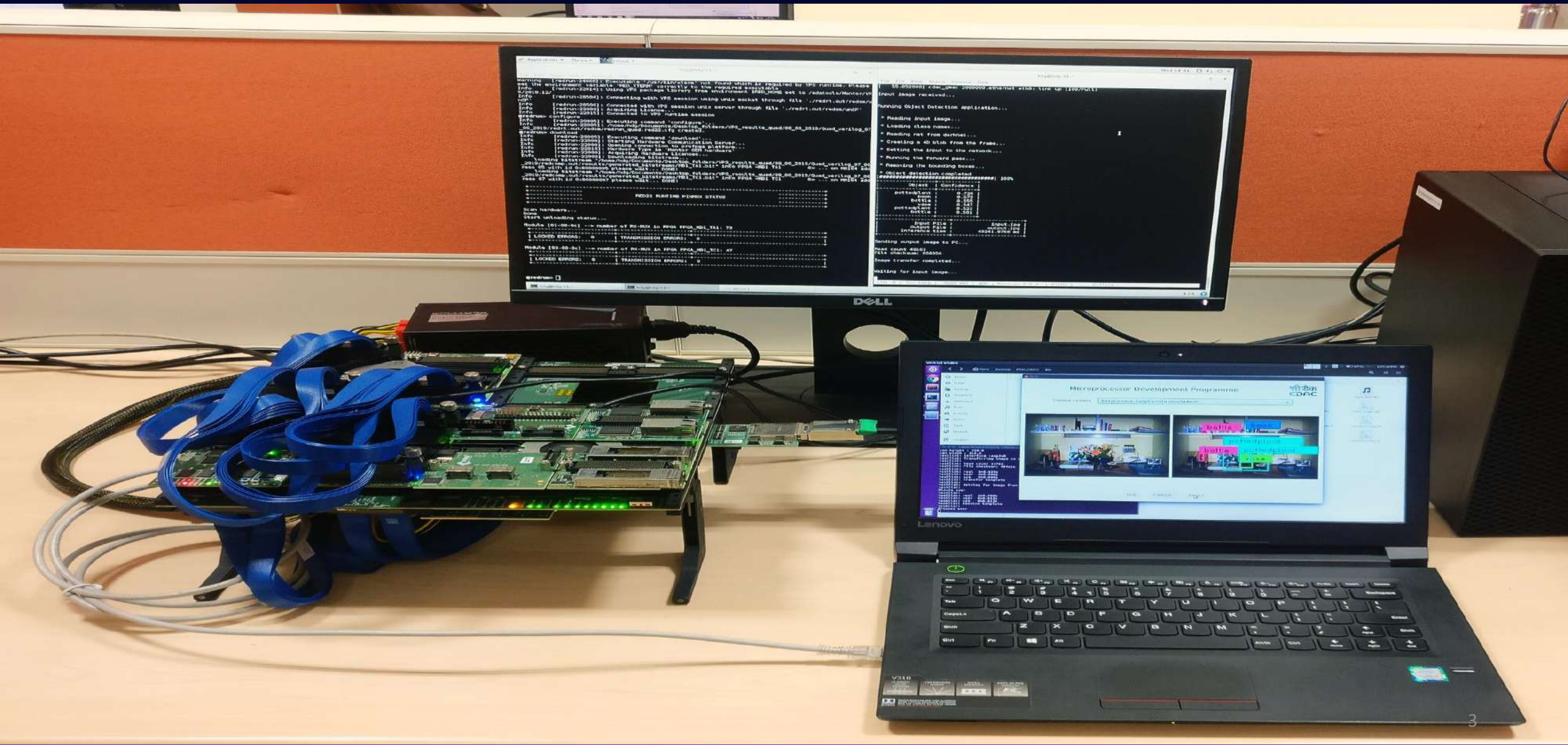
शक्ति वेगा

SHAKTI Processor Chips





VEGA Processor IP demonstration on FPGA



Scope of the स्वदेशी Microprocessor Challenge

- Start-ups, Students, innovators to use **स्वदेशी** processors for development of frugal solutions in the area of **Healthcare, Agriculture, Environment, Office Automation, Sensors, AI/ ML, Navigation, etc.**

स्वदेशी Microprocessors ecosystem available for participants at MyGov portal-

1. **शक्ति** Processor by IIT Madras
2. **वेगा** Processor by C-DAC

Peripheral IPs, Software Development Kit/ OS/ Tool-chain/ Tutorials/ Labs

Indicative solutions

(not limited to the following)

- IoT Based Weather Reporting System
- IoT Based Air Pollution Monitoring System
- IoT Based Traffic Management System
- IoT Based Garbage Monitoring System
- IoT Based Street Light Monitoring System
- IoT Based Early Flood Detection and Avoidance
- IoT Smart Anti-theft System
- IoT Based Health Monitoring System
- Other edge computing applications
- **…..**
- **….. etc**

- Drones/ Robotic applications
- Smart city applications
- Smart Water Irrigation System
- Smart Garage Door/ Parking System
- Touch-Based Home Automation System
- Facial Recognition Door
- Liquid Level Monitoring
- Gas Pipe Leakage Detector
- Smart Garage Door
- Smart Anti-theft System
- Other embedded applications
- **…..**
- **…..**
- **……etc**

स्वदेशी Microprocessor Challenge- process flow for the applicants

Registration by Applicants at **MyGov** web portal

Submission of proposal by Quarter Finalists

Evaluation of proposals by **Committee**

100 Semi-Finalists for POC development :

1. Swadeshi processors from **C-DAC/ IIT-M** website & ported on FPGA
2. Shipping of **FPGA Boards**
3. Upto Rs. 1 Crore to 100 Teams for procurement of COTS

Development of POC (Proof-of-Concept) by 100 Semi Finalists

Evaluation by Committee of POC demonstration

Upto Rs. 1 Crore to 25 Finalists for development of Hw prototype

Development of Hw Prototype by 25 Finalists

Evaluation of Hw prototypes by **Committee**

Announcement of 10 Winning teams

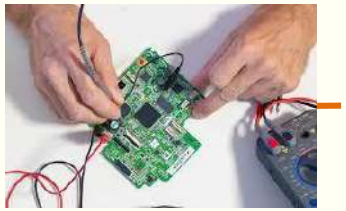
Incubation Support for 1 year to Winning Teams at **Maker Village** or **Incubator** nearest to their Geographic location.

1. Mentoring & access to infrastructure at **Maker Village** or **Incubator** nearest to their Geographic location
2. Quarterly Reviews & milestone linked fund release.

Timelines of स्वदेशी Microprocessor Challenge

Registration Closed/ 8-Week Quarter-Final Starts

12-Week Semi-Final Starts



Final Begins

18'Aug'20

15'Sep 20

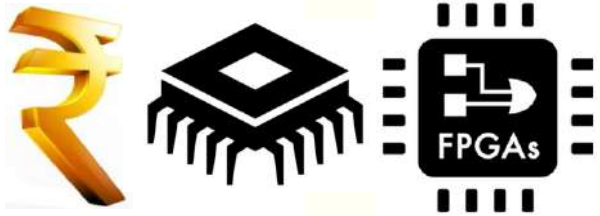
15 Nov' 20

01 Jan'20

01'Apr 20

01'May20

01'June 20



Challenge Launch/ 4-Week Registration Starts

Results Announced

Quarter-Final End/ 6-Week Preparation Starts

Semi-Final End/ 4-Week Preparation Starts

AWARDS

Stages	# of Participants	Award to each Participant	Total Award
Quarter Final	100	Rs. 1.00 Lakh	Rs. 1.00 Crore
Semi Final	25	Rs. 4 Lakh	Rs. 1.0 Crore
Final	10	Cash Prize to top 10 Teams including the funding for next 12 months to launch their Startup/ Incubation - 1. Up to Rs. 35.00 Lakh, Rs. 30.00 Lakh and Rs. 25.00 Lakh to the Winning Team, 1st Runner-up Team and 2nd Runner-up Team respectively. 2. Up to Rs. 20.00 Lakh to other 7 Teams	Rs. 2.30 Crore
		Award Total	Rs. 4.30 Crore

WINNERS
Gold Certificate
Total Rs. 2.30 Crore of Seed Fund for Incubating start-up to 10 Teams.
FINALISTS
Silver Certificate
Total Rs. 1.0 Crore of Prototype Development Fund to 25 Teams.
SEMI FINALISTS
Bronze Certificate
Total Rs. 1.0 Crore of MVP/POC Development Fund and Free Access to Swadeshi Processors & FPGA Board to 100 Teams.

Thank You