

PSG COLLEGE OF TECHNOLOGY: COIMBATORE – 641 004
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG.
VLSI DESIGN CENTRE



Name of the Sponsor	Amount
Ministry of Electronics and Information Technology (MeitY)	1.69 Crores
PSG Management	20,00,000 Lakhs
TEQIP	2,67,350 Lakhs

Coordinator – Dr.P.Kalpana

Co-Coordinator – Dr.K.Rajalakshmi

Faculty Members

Dr.J.Ramesh

Dr.S.Hema Chitra

Dr.M.Santhanalakshmi

Dr.P.Saravanan

Mrs.A.Uma

Mr.K.R.Radha Krishnan

Mrs.C.Satyashree Sowbarnica

Mrs.N.Devipriya

Project Associate

Mr.S.Udaya Shankar

Lab Engineer

Mr.P.Madhankumar

I. HARDWARE AND SOFTWARE DETAILS

SOFTWARE'S AVAILABLE

Synopsys EDA tools:

- Asia Pac Front End University Bundle - 5 licenses
- Asia Pac Back End University Bundle - 5 licenses
- Asia Pac 2D TCAD University Bundle - 5 licenses
- Asia Pac Full Custom University Bundle - 3 licenses

Cadence EDA Tools:

- Core System Development Suite (SDS) Bundle for digital and analog (Front-end and back end) - 20 Licenses
- CADENCE Analog & Digital PG 99Y10L (Tool for both front end and back end IC designs) -10 Licenses

Mentor EDA Tools

- Bundle/Tools set IC Nanometer Design Bundle (Eldo, Questa, ADMS, Pyxis, Calibre, IE3D) - 1 Bundle (100 User Licenses)
- Design Verification and test bundle (Vista, ReqTracer, Questa Simulation, Questa Codelink, Precision synthesis, Leonardo spectrum, Tessent, System vision) -1 Bundle (100 User Licenses)
- Board/PCB Bundle -1 Bundle(100 User Licenses)

XILINIX EDA TOOLS & FPGA BOARDS

- Bundle/Tools set Vivada System Design set - 1 Bundle (25 User Licenses)
- SDSoC Development set - 1 Bundle (25 User Licenses)
- Bundle-1 of Boards and Accessories Basys3 Board + PMOD keypad+ PMOD CLP Analog Discovery Kit) - 10 Nos - 3 Nos
- Bundle-2 of Boards and Accessories Zybo board - 5 Nos Nexsys4-DDR Board - 5 Nos
- **Xilinx** System Edition – Vivado Design Suite 2012
- **ALTERA**
 - FPGA Development Board – a ICB HSMC - 1No
 - FPGA Development Board - a DE2 115 - 1No
 - FPGA Development Board a Video and Embedded Kit - 1 No
- **Xilinx** FPGA Development Board - 2 Nos

HARDWARE

- Number of PC's supported from Management - 3 Servers + 25 Systems
- Number of PC's supported from MeitY (SMDP C2SD) - 5 HP Systems

II. COLLABORATION WITH INSTITUTIONS

The centre has collaboration with

- Indian Institute of Science Bangalore,
- Semiconductor research work Laboratory Department of Space, Government of India and Digital India Corporation (Formerly Media Lab Asia), Govt of India.

III. ABOUT SPECIAL MANPOWER DEVELOPMENT PROGRAMME – CHIPS TO SYSTEM DESIGN

Ministry of Communications & IT, Government of India has promoted the Special Manpower Development Programme for VLSI Design and Related software with an objective of developing the VLSI activities through the establishment of VLSI Centers and giving training to under graduate, post graduate (MS / M Tech) and Doctoral (PhD) levels in VLSI related fields. SMDP-I was initiated in the year 2000, involving nineteen institutions categorized into 7 resource centers (RC's) and 12 Participating Institutes (PI's). After completion of this Project, the second phase of the Program (SMDP-II) was started in 2005. The ministry provided support to set up VLSI Design Centre with Systems, Hard wares and advanced CAD software tools in all the 32 institutions

Ministry of Electronics and Information Technology, Govt of India has initiated Special Manpower Development Programme for Chips to system Design in 2015. PSG College of Technology is one among the 60 institutions in India, sanctioned with the total project outlay of 1.69 cores through C2SD project .The Project has following broad Objectives

- a) Bring in a culture of system on Chip/System designing by developing working prototypes with societal applications using mostly in-house designed ASICs/ICs
 - b) Capacity building in the area of VLSI/Microelectronics and Chip to System development i.e. to train Special manpower in the area of VLSI Design and chips to Systems at BE/B.Tech, ME/M.Tech and PhD level
 - c) Broaden the base of ASIC/IC designing in the country
 - d) Broaden the R&D base of Microelectronics /Chip to system through Network PhD program
 - e) Promote Knowledge Exchange Program
 - f) Promote protection of Intellectual Property generated under the program
- ECE Department has also received grant of support under **Visvesvaraya PHD scheme** for Electronics & IT Digital India Corporation (Formerly Media Lab Asia), Govt of India through SMDP – C2SD Project.

IV SPONSORED RESEARCH PROJECTS

1. Development of Application Specific Integrated Circuits(ASIC) for Light Combat Aircraft

The main objective of this project is to develop an Application Specific Integrated Circuit (ASIC) to be used in Light Combat Aircraft for sensors interfacing. Atmospheric variations like temperature and pressure are observed by sensors and the sensors are interfaced to controller for processing the data.

This Cluster project is being implemented by IISc, Bangalore with PSG College of Technology, Coimbatore, NIT - Warangal, IIT - Hyderabad, NITK - Surathkal and NIT-Rourkela.

At PSG College of Technology Processor module, boot loader and test environment are being developed.

2. Biometric Identification System

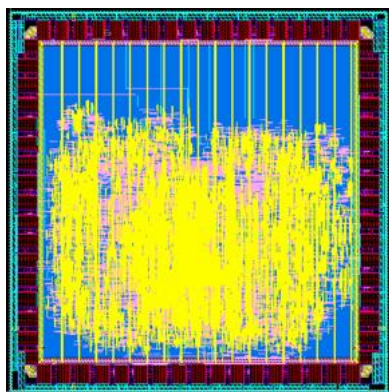
Biometric ID cards apply to a number of different solutions, especially for those companies and individuals that might require greater security. Those companies that work in highly competitive fields might want biometric ID Cards as added security against illegal duplication and theft. Even biometric cards for children are starting to be implemented and are an excellent way to identify them quickly and easily, especially if they are young enough to forget important information like their home address and number.

The project aims to improve the security of these cards by improving the side channel resistance of the same. The side channel attacks in particular power analysis attacks take advantage of the inherent leakage of the cryptographic implementation of the device. Hence the proposed architecture includes a suitable countermeasure that resists such kind of attacks, thereby making the biometric ID cards more secure.

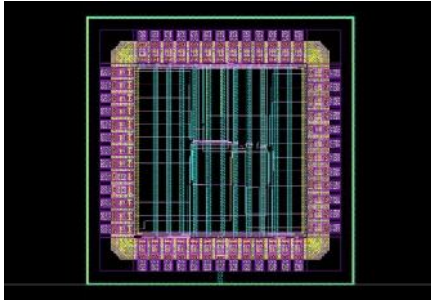
SPECIAL MANPOWER DEVELOPMENT PROGRAMME FOR - CHIPS TO SYSTEM DESIGN

1) Chip Developed using 0.18micrometer SemiConductor Laboratory (SCL) Technology – 2021

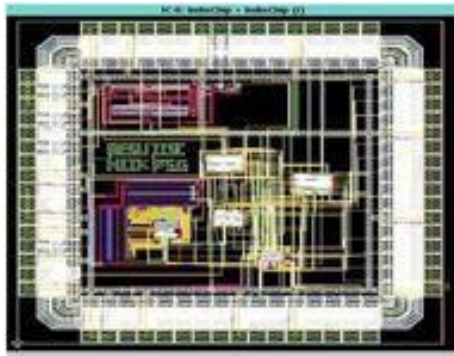
Power Analysis Attack Tolerant Configurable AES Crypto-processor



2) Chip Developed using 0.18micrometer SemiConductor Laboratory (SCL) Technology – 2019
Serial Peripheral Interface Controller



CHIP FABRICATED FROM SMDP – PHASE II



In the year 2008, under India chip programme an integrated circuit is fabricated jointly with Indian Institute of science, Bangalore.

V.LAB UTILIZATION AND OUTCOMES

- ME VLSI Design Accredited by NBA for Five years (2016 – 2022)
- VLSI EDA Tools Xilinx, Synopsys, Cadence and Mentor Graphics are used by the ME VLSI Design students for their laboratory and project works.
- Apart from ME VLSI Design , other Master branches like Wireless communication, Communication Systems and Applied Electronics are using the tools for their laboratory and Project works.
- Under graduate Course in ECE uses the Mentor Graphics tools and Xilinx tools for their laboratory works.
- Under graduate and post graduate students uses FPGA Kits for their laboratory and project Works.
- Doctoral Research scholars are utilising the hardware and software tools for their research work.
- Many Core placement Companies like Intel, QUALCOMM, IBM. HCL, Xilinx, AMD, Western Digital, etc offer internships and placements to students based on the skills and knowledge acquired by students using EDAtools.
- One Year Certification course on VLSI design is proposed. The hardware and software facilities from the design centre will be utilized to conduct the program.
- Number of PhDs completed in the VLSI Design Centre is 28.
- PSG – INTEL Centre of Excellence in VLSI System Design is to be established with Advanced hardware and software from Intel with the contribution of Rs.2 Crores from Intel and 25 Lakhs from PSG College of Technology.

VI. EVENTS ORGANISED

1. International Symposium Organized

No	Name of The Coordinators	Name of the Conference	Date	Number of Participants	Amount Earned (Rs.)
1.	Dr.S.Subha Rani Dr.P.Kalpana Dr.S.Hema Chitra Dr.M.Santhanalakshmi Dr.K.Rajalakshmi Dr.P.Saravanan Mrs.A.Uma Mr.K.R.Radha Krishnan Dr.U.Saravana Kumar Mr.K.Rajasekar	18 th International Symposium on VLSI Design and Test (VDAT – 2014)	16 – 18 July 2014	135	12,00,000

2. Conferences Organized

No	Name of The Coordinators	Name of the Conference	Date	Number of Participants	Amount Earned (Rs.)
1	Dr.V.Krishnaveni Dr.V.K.Manoharan Dr.G.Srivatsun Dr.P.Saravanan Dr.R.Venkateswari Dr.C.Ramya Dr.S.Mohandass Mrs.A.Uma Mrs.K.Chandradevi	One Day Virtual Conference on Micro NANO Electronics & Communication Systems(MECS' 2021) (Online)	08.05.2021	53	
2	Dr.S.Subha Rani Dr.P.Kalpana Dr.M.Santhanalakshmi Dr.P.Saravanan	Two day National Conference on Micro Nano Electronics & Communication Systems	12 th – 13 th , April 2019	100	30000
3	Dr.S.Subha Rani Dr.P.Kalpana Mrs.A.Uma Dr.P.Saravanan	NationalConference on VLSI Design Communication and Nanotechnologies	23rd –24th March 2018	50	25,000
4	Dr.S.Subha Rani Dr.P.Kalpana Dr.M.Santhanalakshmi Mrs.A.Uma	NationalConference on Advance in Micro and Nano Electronics (NCAMNE-2017)	27th - 28th Apr 2017	50	24,250
5	Dr.S.Subha Rani Dr.P.Kalpana Mrs.A.Uma Dr.M.Santhanalakshmi	NationalConference on Advance in Micro and Nano Electronics (NCAMNE-2016)	23rd April 2016	50	31,383
6	Dr.S.Subha Rani Dr.P.Kalpana Dr.M.Santhanalakshmi Mrs.A.Uma	National Conference on Electronic Chip to System Design and Next Generation Communication Technologies	29th & 30th April 2015	60	25000
7	Dr.S.Subha Rani Dr.P.Kalpana	AICTE Sponsored National Conference on Research Challenges in Wireless Communication Systems and VLSI Design	14th & 15th March 2014	60	2,00,000
8	Dr.P.T.Vantahi Dr.J.Ramesh Dr.G.Umamaheswari Dr.L.Thulasimani Mr.S.Mohandass Mr.K.Rajasekar	TEQIP –II Sponsored National Conference on Communication Systems and VLSI Design	30th January 2014	60	75,000
9	Dr.S.Subha Rani Dr.P.Kalpana	NationalConference onVLSI,Communication ,Wireless Technologies	6th – 7th ,May 2013	50	21,000

3. Workshops Organized

No	Name of The Coordinators	Programme Title	Date	Number of Participants
1	Dr.V.Krishnaveni Dr.K.Rajalakshmi Mrs.N.Devipriya	Two Days Online Workshop on Modeling of SoC using Xilinx Vivado tools (Online)	18.12.2020 19.12.2020	40
2	Dr.V.Krishnaveni Dr.V.K.Manoharan Dr.G.Srivatsun Dr.P.Saravanan Dr.R.Venkateswari Dr.C.Ramya Mrs.A.Uma Mrs.K.Chandradevi Dr.S.Mohandass	One day Online workshop on Micro Nano Electronics & Communication Systems (MECS' 20) (Online)	26.06.2020	50
3	Dr.S.SubhaRani Dr.P.Kalpana Dr.M.Santhanalakshmi	Hands on Worksho on FPGA Based Embedded System Design	11.10.2019 12.10.2019	30
4	Dr.S.Subha Rani Dr.M.Santhanalakshmi Mrs.A.Uma	TEQIP III Sponsored Sponsored Three Days Workshop on Linux and Python Scripting	26.07.2019 28.07.2019	40
5	Dr.P.Saravanan	One Credit course on Embedded Processing with FPGAs	06.10.2018 – 07.10.2018	45
6	Dr.S.Subha Rani Dr.P.Kalpana Dr.S.Allin Christe Dr.M.Santhanalakshmi Dr.K.Rajalakshmi	Signal and Image Processing on Zynq- 7000 Soc Using Xilinx Vivado Tools	27.09.2018 – 28.09.2018	25
7	Dr.S.Subha Rani Dr.P.Kalpana Dr.M.Santhanalakshmi Mrs.A.Uma	TEQIP III Sponsored Sponsored Three Days Workshop on Scripting Using Python	12.07.2018 – 14.07.2018	60
8	Dr.P.Saravanan Mrs.M.Swathipriya	TEQIP III Sponsored Two Day workshop on Universal Verification Methodology (UVM)	19.05.2018 – 20.05.2018	20
9	Dr.S.Subha Rani Dr.P.Saravanan Mr.M.Alagappan	Expert Lecture on Analog CMOS Integrated Circuit Design (Architecture to Silicon)	10.03.2018	60
10	Dr.P.Saravanan Mrs.M.SwathiPriya	TEQIP III Sponsored One Credit course on System Level Verification Techniques and Methodologies	03.03.2018 – 04.03.2018	50
11	Dr.S.Subha Rani Dr.P.Kalpana Dr.K.Rajalakshmi Dr.M.Santhanalakshmi	System Design Using Vivado Design Suite and Zynq-7000-SoC	27.10.17 - 28.10.17	25

12	Dr.S.Subha Rani Dr.P.Kalpana Mrs.A.Uma Ms.C.Satyashreesowbarnica	Two Day Workshop on Scripting Using Python	07.07.17 - 08.07.17	60
13	Dr.S.Subha Rani Dr.P.Kalpana Dr.P.Saravanan Mrs.M.Swathi Priya	Two Day Workshop on Command Line Interface and scripting using Python	02.07.16 - 03.07.16	45

4. Faculty Development Program Organized

No	Name of The Coordinators	Programme Title	Date	Number of Participants	Amount Earned (Rs.)
1	Dr.V.Krishnaveni Dr.P.Saravanan Dr.S.Hema Chitra	MeitY Electronics & ICT Academy sponsored Five Day Faculty Development Programme on "VLSI Chip Design Hands on using Open Source EDA"	16.12.2019 20.12.2019	24	70,000
2	Dr.S.Subha Rani Dr.S.Hema Chitra	AICTE Sponsored One Week Short Term Training Programme on Computer Aided Design For VLSI	11.11.2019 16.11.2016	40	1,85,000
3	Dr.S.Subha Rani Dr.P.Saravanan Mr.M.Alagappan Mr.K.R.Radha Krishnan	MeitY Electronics & ICT Academy IIT Guwahati Sponsored One Week Faculty Development Programme on "VLSI Design at Deep Submicron Node" in association with Semiconductor Laboratory, Chandigarh.	04.02.2019 – 08.02.2019	35	1,40,000

4	Dr.S.Subha Rani Dr.P.Kalpana Dr.P.Saravanan Mr.M.Alagappan	TEQ IP -II Sponsored seven day Faculty Development Programme on Multi scale Modeling and simulation of Nan electronic Devices – A Research Perspective	25.07.2016 31.07.2016	25	75,000
5	Dr.S.Subha Rani Dr.P.Kalpana Dr.P.Saravanan	AICTE sponsored Faculty development Programme on Verification and Testing of VLSI Circuits	06.11.2013 19.11.2013	40	4,00,000
6	Dr.S.Subha Rani Dr.P.Kalpana Mrs.M.Santhanalakshmi Mrs.K.Rajalakshmi Mrs.A.Uma Dr.P.Saravanan Mr.K.Rajasekar	TEQIP II Sponsored Faculty Development Programme on VLSI architectures for signal processing	18.11.2013 – 23.11.2013	29	75,000

5. Training Programmes Organized

No	Name of the Coordinator(s)	Title of Course	Organized by	Date	Number of Participants	Amount Earned (Rs.)
1	Dr.V.Krishnaveni Dr.P.Saravanan Dr.S.Hema Chitra	MeitY - Electronics & ICT Academy Sponsored Joint Online Summer Course on “Quantum Computing (Online)	ECE Dept,PSG CT	24.08.2020 – 28.08.2020	75	-
2	Dr.S.Subha Rani Dr.P.Saravanan Dr.S.Hema Chitra	AICTE Sponsored One week Short term Training Program on From Idea to Implementation : Exploring the Potentials of FPGA in Smart Enivornment	ECE Dept,PSG CT	17.06.19 – 22.06.19	42	1,50,000

3	Dr.S.Subha Rani Dr.S.Hema Chitra	AICTE Sponsored One Week Short Term Training Program on Computer Aided Design for VLSI	ECE Dept,PSG CT	11.11.2019 16.11.2019	69	1,50,000
4	Dr.S.Subha Rani Dr.P.Kalpana Mrs.M.Swathi priya Mr.S.Udaya Shankar	Five Days Training Programme on Mixed Signal SoC : Design to Sign-Off	ECE Dept, PSG CT	19.06.2017 To 23.06.2017	15	69,000
5	Dr.S.Subha Rani Dr.P.Kalpana Mrs.M.Swathi priya	SMDP - C2SD MeitY Sponsored Cadence tool training	ECE Dept, PSG CT	23.01.2017 to 25.01.2017	17	2,75,000
6	Dr.S.Subha Rani Dr.P.Kalpana Dr.K.Rajalakshmi	SMDP -C2SD MeitY Sponsored Mentor Graphics tool training	ECE Dept, PSG CT	16.01.2017 to 19.01.2017	12	1,50,000

6. ISTE STTP Conducted

No	Name of the Coordinator(s)	Title of Course	Organized	Date	Participants	Amount Earned (Rs.)
1	Dr.K.Rajalakshmi Mrs.A.Uma	Two-Week ISTE STTP On Cmos, Mixed Signal And Radio Frequency Vlsi Design	IIT Karagpur ,and ECE Dept,PSG CT	30.01.2017 to 04.02.2017	35	1,47,000
2.	Dr.M.Santhalakshmi	Two-Week ISTE STTP On Analog electronics	IIT Karagpur and IIT Bombay, ECE Dept,PSG CT	04.06.13 to 14.06.13	31	1,10,000

7.Seminar Conducted

No	Name of the Coordinator(s)	Title of Course	Organized	Date	Participants
1	Dr.K.Rajalakshmi	Webinar on “Evolution of CMOS Technology, Challenges and Promising Future Technologies	ECE Dept,PSG CT	10 th April 2021	25
2	Dr.V.Krishnaveni Mrs.A.Uma Mrs.K.Chandradevi	A Four Day Technical Webinar Series in the area of VLSI and Nanotechnology COGNIZANCE – 2020 (Online)	ECE Dept,PSG CT	27,28,29,31, August 2020	60
3	Dr.V.Krishnaveni Dr.V.K.Manoharan Dr.P.Saravanan	Four Day Webinar Series ADVAIT-2020 on Life-skill development and Technical research in the area of Micro and Nanoelectronics (Online)	ECE Dept,PSG CT	21,24,25,26 August 2020	100
4	Dr.P.Saravanan	Indian Council of Medical Research (ICMR) Sponsored National level seminar on Research Perspectives in FPGA-Based Medical Electronic Devices for Healthcare Applications	Indian Council of Medical Research (ICMR)& ECE Dept, PSG CT	23 – 24 March 2018	60
5	Dr.P.Kalpana Mr.K.R.Radhakrishnan	Awareness Program on IEEE blender learning program in VLSI	ECE Dept, PSG CT	22 nd ,August 2015	70
6	Dr.P.Kalpana Mr.K.R.Radhakrishnan	Technical seminar on Signal Integrity EMI/EMC & Reliability	ECE Dept, PSG CT	06, August 2015	30
7	Dr.S.Subha Rani Dr.P.Kalpana	Didactic Seminar on OrCAD PSPICE & OrCAD PCB	Entuple Technologies & ECE Dept PSG CT	24 th , August 2015	100

8.Consultancy Works

Three Faculty Members from Sri Krishna College of Arts and Science, Coimbatore has used the **Synopsys TCAD, Cadence Tools** from the VLSI Design Centre for their research.

S.No	Name	College Name
1.	Sudheesh.S Rajesh.A.P. Sithara.A	Sri Krishna College of Arts and Science, Coimbatore

9.Seminars/Workshops Organized

Sl. No	Name of the Coordinators	Title of the Seminar	Organized	Date	Number of Participants
1	Dr.K.Rajalakshmi	Webinar on “Evolution of CMOS Technology, Challenges and Promising Future Technologies	ECE Dept,PSG CT	10th April 2021	25
2	Dr.V.Krishnaveni Dr.K.Rajalakshmi Mrs.N.Devipriya	Two Days Online Workshop on Modeling of SoC using Xilinx Vivado tools (Online)	PSG Centre for Non – Formal & Continuing Education & ECE dept PSG CT	18.12.2020 - 19.12.2020	40
3	Dr.V.Krishnaveni Mrs.A.Uma Mrs.K.Chandradevi	A Four Day Technical Webinar Series in the area of VLSI and Nanotechnology COGNIZANCE – 2020 (Online)	ECE Dept,PSG CT	27,28,29,31, August 2020	60
4	Dr.V.Krishnaveni Dr.V.K.Manoharan Dr.P.Saravanan	Four Day Webinar Series ADAIT-2020 on Life-skill development and Technical research in the area of Micro and Nanoelectronics (Online)	ECE Dept,PSG CT	21,24,25,26 August 2020	100
5	Dr.V.Krishnaveni Dr.V.K.Manoharan Dr.G.Srivatsun Dr.P.Saravanan Dr.R.Venkateswari Dr.C.Ramya Mrs.A.Uma	One day Online workshop on Micro Nano Electronics & Communication Systems (MECS’ 20) (Online)	ECE Dept,PSG CT	26th June 2020	50

	Mrs.K.Chandradevi Dr.S.Mohandass				
6	Dr.S.Subha Rani Dr.P.Kalpana Dr.M.Santhanalakshmi	Hands on Workshop on FPGA Based Embedded System Design	ECE Dept, PSG CT	11.10.2019 12.10.2019	30
7	Dr.S.Subha Rani Dr.M.Santhanalakshmi Mrs.A.Uma	TEQIP – III Sponsored Three Days workshop on Scripting Using Python	TEQIP – III ECE Dept, PSG CT	26.07.2019 – 28.07.2019	40
8	Dr.S.Subha Rani Dr.P.Saravanan Mr.M.Alagappan	TEQIP – III Sponsored one day Expert Lecture on Architecture to Silicon {CMOS Implementation flow)	TEQIP – III ECE Dept, PSG CT	10.03.2018	53
9	Dr.P.Kalpana Mr.K.R.Radha Krishnan	Awareness Program on IEEE blended learning program in VLSI	ECE Dept, PSG CT	22-08-2015	70
10	Dr.P.Kalpana Mr.K.R.Radha Krishnan	Technical seminar on Signal Integrity EMI/EMC&Reliability	ECE Dept, PSG CT	6-08-2015	30
11	Dr.S.Subha Rani Dr.P.Kalpana	Didactic Seminar on OrCAD PSPICE & OrCAD PCB	Entuple Technologies	24-06-2015	100
12	Dr.S.Subha Rani Dr.P.Kalpana Mr.K.R.Radha Krishnan	CoreEl - Digilent Workshop 2015	ECE Dept, PSG CT	21.09.2015	20
13	Dr.S.Subha Rani Dr.P.Kalpana Dr.M.Santhanalakshmi Dr.K.Rajalakshmi	Two days workshop - on "Analog IC Design Flow"	ECE Dept, PSG CT	11.08.15 & 12.08.15	20
14	Dr.S.Subha Rani Dr.P.Kalpana Dr.U.Saravanakumar, Mr.K.R.Radha Krishnan	Two Day Workshop on Reconfigurable Architectures for Biomedical Signal and Image Processing	ECE Dept, PSG CT	21.02.15- 22.02.15	36
15	Dr.S.Subha Rani Dr.P.Kalpana Mr.P.Sarvann	One day workshop on Universal Verification Methodology (UVM)	ECE Dept, PSG CT	12.10.14	24

16	Dr.S.Hemachitra Mr.K.R.Radhakrishnan	TEQIP II Sponsored One credit course on Scripting Languages	Analog Devices, Bangalore ECE Dept, PSG CT	26.07.14 & 27.07.14	74
17	Dr.P.T.Vanathi Dr.J.Ramesh	Two days workshop on Digital Design with Verilog	ECE Dept, PSG CT	01.04.14 02.04.14	82
18	Dr.P.Kalpana Mr.K.R.Radhakrishnan	Three days training programme on Mentor Graphics EDA tools for ASIC design flow	ECE Dept, PSG CT	22.08.13 24.08.13	36
19	Dr.P.Kalpana	Two days workshop on Cadence Design Tools	ECE Dept, PSG CT	28.01.13 29.01.13	25
20	Dr.S.Subha Rani Dr.P.Kalpana Mr.U.Saravanakumar Mr.K.Rajasekar	FPGA based system design	ECE Dept, PSG CT	20.04.13 21.04.13	35
21	Dr.S.Hemachitra Mr.K.R.Radhakrishnan	Scripting Languages (One credit course)	Analog Devices, Bangalore	09.02.13 10.02.13	23

VII

1. PhD REGISTERED (ON GOING)

S. No	Scholar Name	Supervisor Name	Year of Registration
1	A.Uma	Dr.P.Kalpana	2014
2	K.R.Radha Krishnana	Dr.S.Subha Rani	2014
3	V.Tamizhsevi	Dr.K.Gunavathi	2014
4	S.Tamizharasu	Dr. P.Kalpana	2014
5	V. Umamaheswari	Dr.J.Ramesh	2015
6	P. Vivek Karthick	Dr.J.Ramesh	2016
7	A.Deepa	Dr.M.Santhanalakshmi	2016
8	S.Hemalatha	Dr.K.Rajalakshmi	2016
9	S. Shanthi Rekha	Dr.P.Saravanan	2016
10	S.Udaya Shankar	Dr.P.Kalpana	2017
11	Navaneethakrishnan	Dr.M. Santhanalakshmi	2017
12	Sridevi	Dr.M. Santhanalakshmi	2018
13	M.Priyadarshini	Dr.P.Saravanan	2019
14	Sudheer Chirivella	Dr.M.Santhanalakshmi	2019
15	Lavanya Takur	Dr.K.Rajalakshmi	2019
16	Parathasarathy	Dr.P.Saravanan	2021

2.PhD Completed

S. No	Scholar Name	Supervisor Name	Date of Completion
1	Elangovan M	Dr.K.Gunavathi	28/04/2021
2	Mythili R	Dr.P.Kalpana	08/04/2021
3	Arunkumar Madhuvappan C	Dr.J.Ramesh	09/09/2019
4	K.Thiruvenkadam	Dr.J.Ramesh	28/03/2018
5	V.Govindaraj	Dr.J.Ramesh	20/06/2018
6	Aby Thomas	Dr.P.T.Vanathi	25/01/2016
7	P.Saravanan	Dr.P.Kalpana	21/08/2015
8	M.Santhanalakshmi	Dr.P.T.Vanathi	07/02/2014
9	J.P.Anitha	Dr.P.T.Vanathi	18/12/2013
10	K.Rajalakshmi	Dr.A.Kandaswamy	27/11/2013

VIII . Placement

Sl.No	Roll Number	Name	Name of the Company
1	19MV02	Dhanasekaran R	Qualcomm
2	19MV05	Srinivas kumar Motupalli G N V	Synopsys India Pvt Ltd
3	19MV06	A.Nivethitha	CTS
4	19MV08	S Rahul	Intel
5	19MV10	Ravikumar Patel	Synopsys India Pvt Ltd
6	19MV31	K.Pavithra	Ignitarium Technology Solutions
7	19MV32	Prithiv L	Qualcomm
8	19MV33	K.Ranjith kumar	Synopsys India Pvt Ltd
9	19MV34	G. Saravananaraj	Western Digital
10	19MV35	P.L. Srividhyaa Alamelu	Qualcomm
11	18MV02	B. Dilliganesh	Qualcomm
12	18MV03	J. Josly Priyatharsni	Robert Bosch
13	18MV04	P. Kousalya	Qualcomm
14	18MV05	S.B. Manooj Kumar	Infosys
15	18MV07	G. Padmasri	Intel
16	18MV08	J.S. Rakesh	Intel
17	18MV09	Samiksha Shrivastava	Xilinx
18	18MV11	B.Srinath	Ignitarium Technologies Pvt Ltd
19	18MV12	T. Yuvasri	Robert Bosch
20	18MV31	C.Abinaya	Ignitarium Technologies Pvt Ltd
21	18MV32	V. Gowtham	Qualcomm
22	18MV33	Kuchi Dinakar	Intel
23	18MV34	Shanmugapriyan B	Qualcomm
24	18MV35	B. Syndia Priyadarshini	Robert Bosch

25	17MV01	J. Anbarasan	JGD Tech Pvt. Ltd
26	17MV03	BoyinaSai Lakshmi Chaitanya	Western Digital
27	17MV04	Chowthri	JGD Tech Pvt. Ltd
28	17MV07	Pavithra	Western Digital
29	17MV08	Praveenraj	Western Digital
30	17MV10	Shivasubramanijarajan	Western Digital
31	17MV11	D.Vidhya	KalycitoInfotech Pvt. Ltd
32	16MV01	Aadhithya N	HCL
33	16MV02	Ashna A	Intel Technologies India Pvt Ltd, Bangalore
34	16MV03	Burjula Sharath Kumar	QUALCOMM
35	16MV04	Deepa R	Intel Technologies India Pvt Ltd, Bangalore
36	16MV05	Keerthana D	Western Digital
37	16MV06	Mahalakshmi A	Western Digital
38	16MV07	Priyaadharshini N	Qualcomm
39	16MV09	Sivashankari T	Intel Technologies India Pvt Ltd, Bangalore
40	16MV10	Akshay Sreeraj	Intel Technology India pvt.Ltd.
41	15MV02	C.Deepak	Intel Technology India pvt.Ltd.
42	15MV03	S.Ezhil	SanDisk
43	15MV04	Arunachalam ReddyMadireddy	Qualcomm India pvt.Ltd
44	15MV05	Mahendra Kumar G	Cognizant Technolgy SolutionsIndia pvt.Ltd
45	15MV06	Mohanraj.B	HCL
46	15MV07	Nivethitha P	Collabera
47	15MV08	Ram Prasad Kamaraj	Yantra Vision Software pvt.Ltd
48	15MV31	Praveen Kumar Jaykar	Qualcomm India pvt.Ltd
49	15MV34	Suba Chandran Nabiraj	Intel Technology India pvt.Ltd.
50	15MV35	Sugitha Elangovan	Soilton Technologies Pvt.ltd
51	15MV37	Yogajanani	TCS
52	14MV02	Damala Janaki	Samsung R & d Institute
53	14MV03	R.Dinesh	Qualcomm India Pvt Ltd
54	14MV04	D.Lalitha Kathambari	Tata Elxsi
55	14MV05	Maramreddy SivaReddy	Samsung R & d Institute
56	14MV06	K.Priyanka	Cognizant Technology SolutionsIndia Pvt Ltd
57	14MV08	Srinivasan Manojkumar	Intel Technology India Pvt Ltd
58	14MV09	G.Varun	AMD India Private Ltd
59	14MV10	R.Yogeshwaran	IBM India Pvt Ltd
60	14MV35	N.Prasath	Wipro Technologies
61	13MV03	Loga Subramani	Qualcomm India Pvt. Ltd
62	13MV04	Purushotham Reddy	Qualcomm India Pvt. Ltd
63	13MV06	Naveenkumar	Synopsys
64	13MV07	Nivedita	Cognizant Technology Solutions
65	13MV08	Sathya	IBM

66	13MV09	Venkata Vishnu	Broadcom
67	13MV10	Yasoda	Qualcomm
68	13MV31	Anjali	Wipro Technologies
69	13MV32	Aravinda Gouthum	Xilinx
70	13MV33	Deepa	PSG iTech
71	13MV34	Devi Priyal	IBM
72	13MV35	Nithya	AMD.
73	13MV37	Vandana	Cognizant Technology Solutions
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