



JP INFOTECH

2017 - 2018 EEE (POWER ELECTRONICS/ POWER SYSTEMS) IEEE Projects @ JP INFOTECH

S.NO	Project Code	IEEE 2017-18 EEE Project Titles	Year
SOLAR ENERGY			
1	JPEEE1701	A Family of Neutral-Point-Clamped Circuits of Single-Phase PV Inverters: Generalized Principle and Implementation	2017
2	JPEEE1702	A Highly Efficient and Reliable Inverter Configuration Based Cascaded Multi-Level Inverter for PV Systems	2017
3	JPEEE1703	A Multilevel Transformerless Inverter employing Ground Connection between PV Negative Terminal and Grid Neutral point	2017
4	JPEEE1704	A New Six-Switch Five-Level Active Neutral Point Clamped Inverter for PV Applications	2017
5	JPEEE1705	A Novel Single Stage Single Phase Reconfigurable Inverter Topology for a Solar Powered Hybrid AC/DC Home	2017
6	JPEEE1706	A Single-Phase Transformerless Inverter with Charge Pump Circuit Concept for Grid- Tied PV Applications	2017
7	JPEEE1707	An Improved Zero-Current-Switching Single-Phase Transformerless PV H6 Inverter with Switching Loss-Free	2017
8	JPEEE1708	Delta Power Control Strategy for Multi-String Grid-Connected PV Inverters	2017
9	JPEEE1709	Design of C _{uk} Derived Transformerless Common Grounded PV Micro-inverter in CCM	2017
10	JPEEE1710	Modified Single-Phase Single-Stage Grid-tied Flying Inductor Inverter with MPPT and Suppressed Leakage Current	2017
11	JPEEE1711	Modulation Technique for Single-Phase Transformerless Photovoltaic Inverters with Reactive Power Capability	2017
12	JPEEE1712	Non-linear PWM Controlled Single-phase Boost Mode Grid-Connected Photovoltaic Inverter with Limited Storage Inductance Current	2017
13	JPEEE1713	Reactive Power Control for Single-phase Grid-tie Inverters using Quasi Sinusoidal Waveform	2017
14	JPEEE1714	Single-stage Three-phase Current-source Photovoltaic Grid-connected Inverter with High Voltage Transmission Ratio	2017
WIND ENERGY			
15	JPEEE1715	A Medium Frequency Transformer-Based Wind Energy Conversion System Used for Current Source Converter Based Offshore Wind Farm	2017

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16	JPEEE1716	Bipolar Operation Investigation of Current Source Converter-Based Wind Energy Conversion Systems	2017
17	JPEEE1717	Control Strategy of Wind Turbine Based on Permanent Magnet Synchronous Generator and Energy Storage for Stand-Alone Systems	2017
18	JPEEE1718	Novel Isolated Power Conditioning Unit for Micro Wind Turbine Applications	2017
19	JPEEE1719	Replacing the Grid Interface Transformer in Wind Energy Conversion System With Solid-State Transformer	2017
MICROGRID			
20	JPEEE1720	A Decentralized Dynamic Power Sharing Strategy for Hybrid Energy Storage System in Autonomous DC Microgrid	2017
21	JPEEE1721	Bi-Directional Single-Stage Grid-Connected Inverter for Battery Energy Storage System	2017
22	JPEEE1722	Control of Hybrid AC/DC Microgrid Involving Energy Storage and Pulsed Loads	2017
23	JPEEE1723	Electric Vehicle Charging Station with an Energy Storage Stage for Split-DC Bus Voltage Balancing	2017
24	JPEEE1724	Hybrid Energy Storage System MicroGrids Integration For Power Quality Improvement Using Four Leg Three Level NPC Inverter and Second Order Sliding Mode Control	2017
MULTIPORT			
25	JPEEE1725	Analysis, Design, Modelling and Control of an Interleaved-Boost Full-Bridge Three-Port Converter for Hybrid Renewable Energy Systems	2017
26	JPEEE1726	Design and Implementation of an Amorphous High Frequency Transformer Coupling Multiple Converters in a Smart Micro Grid	2017
27	JPEEE1727	Dual-DC-Port Asymmetrical Multi-Level Inverters with Reduced Conversion Stages and Enhanced Conversion Efficiency	2017
28	JPEEE1728	Dual-Transformer based Asymmetrical Triple-Port Active Bridge (DT-ATAB) Isolated DC-DC Converter	2017
INVERTER			
29	JPEEE1729	A 4-Switch Single-Stage Single-Phase Buck-Boost Inverter	2017
30	JPEEE1730	A Highly Reliable and High Efficiency Quasi Single-Stage Buck-Boost Inverter	2017
31	JPEEE1731	Interleaved Resonant Boost Inverter Featuring SiC Module for High Performance Induction Heating	2017

32	JPEEE1732	Maximum Boost Control of Diode-assisted Buckboost Voltage Source Inverter with Minimum Switching Frequency	2017
33	JPEEE1733	Modeling and Optimization of a Zero Voltage Switching Inverter for High Efficiency and Miniaturization	2017
MULTI LEVEL AND ZSOURCE INVERTER			
34	JPEEE1734	A New Class of Single-Phase High-Frequency Isolated Z-Source AC-AC Converters with Reduced Passive Components	2017
35	JPEEE1735	A Novel Nine-Level Inverter Employing One Voltage Source and Reduced Components as High Frequency AC Power Source	2017
36	JPEEE1736	Enhanced-Boost Quasi-Z-Source Inverters with Two Switched Impedance Network	2017
37	JPEEE1737	High Voltage Gain Half-Bridge Z-Source Inverter with Low Voltage Stress on Capacitors	2017
38	JPEEE1738	Quasi Cascaded H-Bridge Five-Level Boost Inverter	2017
39	JPEEE1739	Steady-State Analysis and Design Considerations of High Voltage Gain Switched Z-Source Inverter with Continuous Input Current	2017
DRIVES			
40	JPEEE1740	A Novel Method of Reducing Commutation Torque Ripple for Brushless DC Motor Based on Cuk Converter	2017
41	JPEEE1741	Commutation Torque Ripple Reduction in BLDC Motor Using Modified SEPIC Converter and Three-level NPC Inverter	2017
42	JPEEE1742	Commutation Torque Ripple Suppression Strategy for Brushless DC Motors With a Novel Non-inductive Boost Front End	2017
43	JPEEE1743	Design and Demonstration of High Power Density Inverter for Aircraft Applications	2017
44	JPEEE1744	Quasi-Z-Source Indirect Matrix Converter Fed Induction Motor Drive for Flow Control of Dye in Paper Mill	2017
WIRELESS POWER TRANSFER			
45	JPEEE1745	A New Integration Method for an Electric Vehicle Wireless Charging System Using LCC Compensation Topology: Analysis and Design	2017
46	JPEEE1746	Bidirectional Current-Fed-Half-Bridge (C)(LC) –(LC) Configuration for Inductive Wireless Power Transfer System	2017
47	JPEEE1747	Higher Order Compensation for Inductive-Power-Transfer Converters with Constant-Voltage or Constant-Current Output Combating Transformer Parameter Constraints	2017

48	JPEEE1748	Modeling and Analysis of AC Output Power Factor for Wireless Chargers in Electric Vehicles	2017
49	JPEEE1749	SiC based Z-Source Resonant Converter with Constant Frequency and Load Regulation for EV Wireless Charger	2017
50	JPEEE1750	Simultaneous Wireless Power/Data Transfer for Electric Vehicle Charging	2017
CONVERTERS:BUCK-BOOST,SEPIC,FLYBACK,PUSHPULL			
51	JPEEE1751	A cascaded Couple Inductor- Reverse high step up converter integrating three-winding coupled inductor and diode-capacitor technique	2017
52	JPEEE1752	A New Negative Output Buck-Boost Converter with Wide Conversion Ratio	2017
53	JPEEE1753	A Novel Structure for Single Switch Non-Isolated Transformerless Buck-Boost dc-dc Converter	2017
54	JPEEE1754	Analysis and Design of Impulse Commutated Zero Current Switching Single Inductor Current-fed Three-phase Push-pull Converter	2017
55	JPEEE1755	Design and Analysis of a Class of Zero Fundamental Ripple Converters	2017
56	JPEEE1756	High-Efficiency Asymmetric Forward-Flyback Converter for Wide Output Power Range	2017
57	JPEEE1757	Passive Regenerative and Dissipative Snubber Cells for Isolated SEPIC Converters: Analysis, Design, and Comparison	2017
HIGH VOLTAGE			
58	JPEEE1758	A High Efficiency Step-Up Current-Fed Push-Pull Quasi-Resonant Converter with Fewer Components for Fuel Cell Application	2017
59	JPEEE1759	A High-Voltage-Gain DC-DC Converter Based on Modified Dickson Charge Pump Voltage Multiplier	2017
60	JPEEE1760	High Step-Up PWM DC-DC Converter with Coupled-Inductor and Resonant Switched-Capacitor	2017
61	JPEEE1761	Ultra-Large Gain Step-Up Coupled Inductor DC-DC Converter With Asymmetric Voltage Multiplier Network for a Sustainable Energy System	2017
62	JPEEE1762	Zero-Ripple Input Current High Step-Up Boost-SEPIC DC-DC Converter with Reduced Switch Voltage Stress	2017
BIDIRECTIONAL CONVERTER			
63	JPEEE1763	A Control Map for a Bidirectional PWM Plus Phase-Shift-Modulated Push-Pull DC-DC Converter	2017

64	JPEEE1764	A Family of True Zero Voltage Zero Current Switching (ZVZCS) Non-isolated Bidirectional DC-DC Converter with Wide Soft Switching Range	2017
65	JPEEE1765	A Novel Reversal Coupled Inductor High-Conversion-Ratio Bi-directional DC-DC Converter	2017
66	JPEEE1766	Cascaded High-Voltage-Gain Bidirectional Switched-Capacitor DC-DC Converters for Distributed Energy Resources Applications	2017
67	JPEEE1767	High Light-Load Efficiency Power Conversion Scheme Using Integrated Bidirectional Buck Converter for Paralleled Server Power Supplies	2017
68	JPEEE1768	Interleaved Switched-Capacitor Bidirectional DC-DC Converter with Wide Voltage-Gain Range for Energy Storage Systems	2017
MULTIPLE OUTPUT CONVERTER			
69	JPEEE1769	A Dual Buck-Boost AC/DC Converter for DC Nano-Grid with Three Terminal Outputs	2017
70	JPEEE1770	Analysis and Design of an Input-Series Two-Transistor Forward Converter for High-Input Voltage Multiple-Output Applications	2017
71	JPEEE1771	Design and Implementation of a High Efficiency Multiple Output Charger based on the Time Division Multiple Control Technique	2017
72	JPEEE1772	Improved Power Quality Bridgeless Converter Based SMPS for Arc Welding	2017
LED APPLICATIONS			
73	JPEEE1773	A Single-Switch AC-DC LED Driver Based on a Boost-Flyback PFC Converter with Lossless Snubber	2017
74	JPEEE1774	An AC-DC LED Driver with a Two Parallel Inverted Buck Topology for Reducing the Light Flicker in Lighting Applications to Low-Risk Levels	2017
75	JPEEE1775	Analysis and Design of a Single-Stage Isolated AC-DC LED Driver with a Voltage Doubler Rectifier	2017
76	JPEEE1776	Flyback-Based Three-Port Topologies for Electrolytic Capacitor-Less LED Drivers	2017
77	JPEEE1777	Single-Stage Single-Switch Four-Output Resonant LED Driver with High Power Factor and Passive Current Balancing	2017
78	JPEEE1778	Single-Switch Coupled-Inductor-Based Two-Channel LED Driver with a Passive Regenerative Snubber	2017
POWER FACTOR CORRECTION			
79	JPEEE1779	A Boost PFC Stage Utilized as Half-Bridge Converter for High Efficiency DC-DC Stage in Power Supply Unit	2017



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80	JPEEE1780	A Family of Single-Phase Hybrid Step-Down PFC Converters	2017
81	JPEEE1781	A Family of Single-Phase Voltage-Doubler High-Power-Factor SEPIC Rectifiers Operating in DCM	2017
82	JPEEE1782	Flexible Mode Bridgeless Boost PFC Rectifier with High Efficiency over a Wide Range of Input Voltage	2017
SOFT SWITCHING CONVERTER			
83	JPEEE1783	A Hybrid ZVZCS Dual-Transformer-Based Full-Bridge Converter Operating in DCM for MVDC Grids	2017
84	JPEEE1784	A New ZVT Snubber Cell for PWM-PFC Boost Converter	2017
85	JPEEE1785	A T-Type Isolated Zero Voltage Switching DC-DC Converter With Capacitive Output	2017
86	JPEEE1786	High Efficiency Soft-Switching AC-DC Converter with Single-Power-Conversion Method	2017
87	JPEEE1787	Soft-Switching Dual-Flyback DC-DC Converter with Improved Efficiency and Reduced Output Ripple Current	2017
RESONANT CONVERTER			
88	JPEEE1788	A New Dual-Bridge Series Resonant DC-DC Converter with Dual-Tank	2017
89	JPEEE1789	Analysis and Design of Current-Fed High Step Up PWM Controlled Quasi-Resonant DC-DC Converter for Fuel Cell Applications	2017
90	JPEEE1790	Analysis and Design of SQR Based High Voltage LLC Resonant DC-DC Converter	2017
91	JPEEE1791	Design and Steady State Analysis of Parallel Resonant DC-DC Converter for High Voltage Power Generator	2017
92	JPEEE1792	Dual-Bridge LLC Resonant Converter with Fixed-Frequency PWM Control for Wide Input Applications	2017
Z SOURCE CONVERTER			
93	JPEEE1793	High-Performance Quasi-Z-Source Series Resonant DC-DC Converter for Photovoltaic Module Level Power Electronics Applications	2017
94	JPEEE1794	Hybrid Z-Source Boost DC-DC Converters	2017
95	JPEEE1795	Load and Source Battery Simulator based on Z-Source Rectifier	2017
96	JPEEE1796	Quasi-Z-Source Network-Based Hybrid Power Supply System for Aluminum Electrolysis Industry	2017

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97	JPEEE1797	Wide Input-Voltage Range Boost Three-Level DC-DC Converter with Quasi-Z Source for Fuel Cell Vehicles	2017
INTERLEAVED CONVERTER			
98	JPEEE1798	A Novel Interleaved Non-Isolated Ultra High Step-Up DC-DC Converter with ZVS Performance	2017
99	JPEEE1799	A Novel Soft-Switching Interleaved Coupled-Inductor Boost Converter with Only Single Auxiliary Circuit	2017
100	JPEEE17100	Discontinuous Current Mode Operation of Two-Phase Interleaved Boost Dc-dc Converter with Coupled-inductor	2017
101	JPEEE17101	Interleaved LLC (iLLC) Resonant Converter with Hybrid Rectifier and Variable-Frequency Plus Phase-Shift (VFPPS) Control For Wide Output Voltage Range Applications	2017
102	JPEEE17102	Zero-Voltage Transition Interleaved Boost Converter with an Auxiliary Coupled Inductor	2017
POWER SYSTEMS			
103	JPEEE17103	A Comprehensive Design Approach of Power Electronic-Based Distributed Generation Units Focused on Power Quality Improvement	2017
104	JPEEE17104	A Low Capacitance Cascaded H-Bridge Multi-Level StatCom	2017
105	JPEEE17105	A Superconducting Magnetic Energy Storage-Emulator/Battery Supported Dynamic Voltage Restorer	2017
106	JPEEE17106	Hybrid Energy Storage System MicroGrids Integration For Power Quality Improvement Using Four Leg Three Level NPC Inverter and Second Order Sliding Mode Control	2017
107	JPEEE17107	On the Application of Single-phase Voltage Sag Compensators in Three-Phase Systems	2017
108	JPEEE17108	Power Quality Enhancement for a Grid Connected Wind Turbine Energy System	2017
109	JPEEE17109	Series Compensator Based on Cascaded Transformers Coupled with Three-Phase Bridge Converters	2017
110	JPEEE17110	Simultaneous Microgrid Voltage and Current Harmonics Compensation Using Coordinated Control of Dual-Interfacing-Converters	2017
111	JPEEE17111	Single-Phase to Three-Phase Unified Power Quality Conditioner Applied in Single Wire Earth Return Electric Power Distribution Grids	2017
112	JPEEE17112	Time-Varying and Constant Switching Frequency Based Sliding Mode Control Methods for Transformerless DVR Employing Half-Bridge VSI	2017
113	JPEEE17113	Unbalanced Control Strategy for a Thyristor Controlled LC-Coupling Hybrid Active Power Filter (TCLC-HAPF) in Three-phase Three-wire Systems	2017



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114	JPEEE17114	Voltage control with PV inverters in low voltage networks – In depth analysis of different concepts and parameterization criteria	2017
115	JPEEE17115	Voltage Flicker Mitigation Employing Smart Loads with High Penetration of Renewable Energy in Distribution Systems	2017

PROJECT SUPPORT TO REGISTERED STUDENTS:

- 1) IEEE Base paper.
- 2) Abstract Document.
- 3) Future Enhancement (based on Requirement).
- 4) Modified Title / Modified Abstract (based on Requirement).
- 5) Complete Source Code/Simulation File/ Hardware Kit.
- 6) How to Run execution help file.
- 7) International Conference / International Journal Publication based on your project.

OUR OTHER SALIENT FEATURES:

- Number 1 Project Master in Pondicherry/Puducherry & Chennai.
- Guided more than 30,000 students.
- Successfully conducted more than 25 International Conferences in all over South India from 2013 to 2017.
- For the academic year **2017- 2018**, we have Signed MoU with Many Engineering Colleges in all over India to Conduct International Conferences in academic year 2017 – 2018, Where the Registered Students of JP INFOTECH, can easily publish their Project Papers.
- Published more than 3000 Research Articles of Our Ph.D./M.Phil/ME/M.Tech./BE/B.Tech. Students in Leading International Conferences and International Journals from 2013 to 2017.

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- From the year **2013 to 2017**, we are Recognized and Awarded from the following colleges: “Paavai College of Engg”, “Arjun College of Technology”, “K.S.R. College of Engineering”, “Vetri Vinayaha College Of Engineering And Technology”, “SKR Engineering College”, “Sree Sastha Institute of Engineering and Technology”, “Jaya Engineering College”, “V.P.Muthaiah Pillai Meenakshi Ammal Engineering College for Women”, “Muthayammal Arts and Science College”, “Sri Raaja Raajan College of Engineering and Technology”, “Latha Mathavan Engineering College”, “Dr Pauls Engineering College”, “Jain College of Engineering”, “Manakula Vinayagar Institute of Technology”, “CK College of Engineering & Technology” etc.
- Recognized and published article about JP INFOTECH and its director in “THE HINDU”, “DINAKARAN” and many more newspapers and Media.
- Leaders with more than 8+ years of experience
- We assist and guarantee you to publish a paper on your project in INTERNATIONAL JOURNAL PUBLICATIONS / INTERNATIONAL CONFERENCE PUBLICATIONS.
- We provide REVIEW DOCUMENTS AND PPTS for each review
- NO FALSE PROMISES
- 100% Assurance for Project Execution
- 100% LIVE EXPLANATION
- VALID TRAINEE CERTIFICATION (ISO Certification)
- 100% PLACEMENT SUPPORT
- Own Projects are also welcomed.

So don't wait any more!!! Join us and be a part of us. Walk-in to our Office OR E-mail us your requirements and Register your projects.

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