

FINAL YEAR PROJECTS

IEEE PROJECTS 2016 – 2017

EEE PROJECTS

S.NO	PROJECT CODE	TITLE OF THE PAPER	YEAR
1	EEE1601	A Bidirectional Three-Level LLC Resonant Converter With PWAM Control	2016
2	EEE1602	High Step-Up/Step-Down Soft-Switching Bidirectional DC-DC Converter With Coupled- Inductor and Voltage Matching Control for Energy Storage Systems	2016
3	EEE1603	Bidirectional Single Power Conversion DC-AC Converter with Non Complementary Active-	2016
4	EEE1604	A New Family of Zero-Voltage-Transition Non-isolated Bidirectional Converters With Simple Auxiliary Circuit	2016
5	EEE1605	Bidirectional Resonant DC-DC Step-Up Converters for Driving High-Voltage Actuators in	2016
6	EEE1606	Interleaved SEPIC Power Factor Pre-Regulator Using Coupled Inductors in Discontinuous Conduction Mode with Wide Output Voltage	2016
7	EEE1607	Single-Stage Bridgeless AC-DC PFC Converter Using a Lossless Passive Snubber and Valley- Switching	2016
8	EEE1608	Reduced Current Stress Bridgeless Cuk PFC Converter with New Voltage Multiplier Circuit	2016
9	EEE1609	Bridgeless SEPIC PFC Converter for Low Total Harmonic Distortion and High Power Factor	2016
10	EEE1610	Full-Range Soft-Switching-Isolated Buck-Boost Converters With Integrated Interleaved Boost Converter and Phase-Shifted Control	2016
11	EEE1611	A PWM Plus Phase-Shift Controlled Interleaved Isolated Boost Converter Based on Semi-active Quadrupler Rectifier for High Step-Up Applications	2016
12	EEE1612	A Bridgeless Totem-pole Interleaved PFC Converter for Plug-In Electric Vehicles	2016
13	EEE1613	Three phase converter with galvanic isolation based on loss-free resistors for HB-LEDlighting applications	2016

14	EEE1614	A CLCL Resonant DC/DC Converter for Two-Stage LED Driver System	2016
15	EEE1615	A Novel LED Drive System Based on Matrix Rectifier	2016
16	EEE1616	Single-Stage AC/DC Single-Inductor Multiple-Output LED Drivers	2016
17	EEE1617	Design and Implementation of a High Efficiency Multiple Output Charger based on the Time Division Multiple Control Technique	2016
18	EEE1618	A Power Quality Improved Bridgeless Converter Based Computer Power Supply	2016
19	EEE1619	Control of a Single-Stage Three-Phase Boost Power Factor Correction Rectifier	2016
20	EEE1620	A High-Voltage SiC-Based Boost PFC for LED Applications	2016
21	EEE1621	LCL Filter Design for Three-phase Two-level Power Factor Correction using Line Impedance Stabilization Network	2016
22	EEE1622	New AC–DC Power Factor Correction Architecture Suitable for High-Frequency Operation	2016
23	EEE1623	Interleaved Digital Power Factor Correction Based on the Sliding-Mode Approach	2016
24	EEE1624	Bumpless Control for Reduced THD in Power Factor Correction Circuits	2016
25	EEE1625	A bidirectional single-stage three-phase Rectifier with high-frequency Isolation and power factor Correction	2016
26	EEE1626	A Sensitivity-Improved PFM LLC Resonant Full-Bridge DC-DC Converter with LC Anti-Resonant Circuitry	2016
27	EEE1627	A New Compact and High Efficiency Resonant Converter	2016
28	EEE1628	High-Efficiency LLC Resonant Converter With High Voltage Gain Using an Auxiliary LC Resonant Circuit	2016
29	EEE1629	A ZVS Pulsewidth Modulation Full-Bridge Converter With a Low-RMS-Current Resonant Auxiliary Circuit	2016
30	EEE1630	Wide ZVS Range Asymmetric Half-Bridge Converter With Clamp Switch and Diode for High Conversion Efficiency	2016
31	EEE1631	A Wide Load Range ZVS Push-Pull DC/DC Converter with Active-Clamped	2016
32	EEE1632	A ZV-ZCS Electrolytic Capacitor Less AC/DC Isolated LED Driver with Continuous Energy Regulation	2016
33	EEE1633	ZVS-ZCS High Voltage Gain Integrated Boost Converter For DC Microgrid	2016
34	EEE1634	Isolated Double Step-down DC-DC Converter with Improved ZVS Range and No Transformer Saturation Problem	2016
35	EEE1635	High-Efficiency Coupled-Inductor-Based Step-Down Converter	2016
36	EEE1636	Morphing Switched-Capacitor Step-Down DC–DC Converters with Variable Conversion Ratio	2016
37	EEE1637	A Novel Transformer-less Interleaved Four-Phase Step-Down DC Converter With Low Switch Voltage Stress and Automatic Uniform Current-Sharing	2016

		Characteristics	
38	EEE1638	A Low-Volume Hybrid Step-Down Dc-Dc Converter Based on the Dual Use of Flying Capacitor	2016
39	EEE1639	A Family of Isolated Buck-Boost Converters Based on Semi-active Rectifiers for High Output Voltage Applications	2016
40	EEE1640	Flying-Capacitor-Based Hybrid LLC Converters With Input Voltage Auto-balance Ability for High Voltage Applications	2016
41	EEE1641	A DC–DC Converter With High Voltage Gain and Two Input Boost Stages	2016
42	EEE1642	High Gain DC–DC Converter Based on the Cockcroft–Walton Multiplier	2016
43	EEE1643	A Three-State Switching Boost Converter Mixed With Magnetic Coupling and Voltage Multiplier Techniques for High Gain Conversion	2016
44	EEE1644	Split-Phase Control: Achieving Complete Soft-Charging Operation of a Dickson Switched-Capacitor Converter	2016
45	EEE1645	Multi-input Step-Up Converters Based on the Switched-Diode-Capacitor Voltage Accumulator	2016
46	EEE1646	Hybrid Bridgeless DCM SEPIC Rectifier Integrated with a Modified Switched Capacitor Cell	2016
47	EEE1647	BLDC Motor Driven Solar PV Array Fed Water Pumping System Employing Zeta Converter Commutation Torque Ripple Reduction Strategy of Z-Source Inverter Fed Brushless DC Motor	2016
48	EEE1648	Single-Phase Input Variable-Speed AC Motor System Based on an Electrolytic Capacitor- Less Single-Stage Boost Three-Phase Inverter	2016
49	EEE1649	Commutation Torque Ripple Reduction Strategy of Z-Source Inverter Fed Brushless DC Motor	2016
50	EEE1650	Switching-Gain Adaptation Current Control for Brushless DC Motors	2016
51	EEE1651	Position Sensorless Control Without Phase Shifter for High-Speed BLDC Motors With Low Inductance and Nonideal Back EMF	2016
52	EEE1652	Single-Phase Grid Connected Motor Drive System with DC-link Shunt Compensator and Small DC-link Capacitor	2016
53	EEE1653	A Performance Investigation of a Four-Switch Three-Phase Inverter-Fed IM Drives at Low Speeds Using Fuzzy Logic and PI Controllers	2016
54	EEE1654	A Systematic Power-Quality Assessment and Harmonic Filter Design Methodology for Variable-Frequency Drive Application in Marine Vessels	2016
55	EEE1655	Bidirectional Single Power-Conversion DC-AC Converter with Non-Complementary Active-Clamp Circuits	2016
56	EEE1656	High-Efficiency Bidirectional DAB Inverter Using a Novel Hybrid Modulation for Stand-Alone Power Generating System With Low Input Voltage	2016
57	EEE1657	A Coupled Inductor Based High Boost Inverter with Sub–Unity Turns–Ratio Range	2016

58	EEE1658	A High Power Density Single-Phase Inverter Using Stacked Switched Capacitor Energy Buffer	2016
59	EEE1659	A ZVS Grid-Connected Full-Bridge Inverter With a Novel ZVS SPWM Scheme	2016
60	EEE1660	Dual Buck Inverter with Series Connected Diodes and Single Inductor	2016
61	EEE1661	Three-Phase Split-Source Inverter (SSI): Analysis and Modulation	2016
62	EEE1662	A Pulse-width Modulation Technique for High-Voltage Gain Operation of Three-Phase Z-Source Inverters	2016
63	EEE1663	Switched-Coupled-Inductor Quasi-Z-Source Inverter	2016
64	EEE1664	Analysis and Design of Modified Half-Bridge Series-Resonant Inverter With DC-Link Neutral-Point-Clamped Cell	2016
65	EEE1665	Hybrid Modulation Scheme for a High-Frequency AC-Link Inverter	2016
66	EEE1666	Design and Implementation of a Novel Multilevel DC-AC Inverter	2016
67	EEE1667	A Novel Nine-Level Inverter Employing One Voltage Source and Reduced Components as High Frequency AC Power Source	2016
68	EEE1668	A Family of Five-Level Dual-Buck Full-Bridge Inverters for Grid-Tied Applications	2016
69	EEE1669	A New Cascaded Switched-Capacitor Multilevel Inverter Based on Improved Series-Parallel Conversion With Less Number of Components	2016
70	EEE1670	A Single DC Source Cascaded Seven-Level Inverter Integrating Switched Capacitor Techniques	2016
71	EEE1671	A Three Phase Hybrid Cascaded Modular Multilevel Inverter for Renewable Energy Environment	2016
72	EEE1672	An Enhanced Single Phase Step-Up Five-Level Inverter	2016
73	EEE1673	Novel Three Phase Multi-Level Inverter Topology with Symmetrical DC-Voltage Sources	2016
74	EEE1674	Series-Parallel Connection of Low-Voltage Sources for Integration of Galvanically Isolated Energy Storage Systems	2016
75	EEE1675	Development of DC/DC Converter for Battery Energy Storage Supporting Railway DC Feeder Systems	2016
76	EEE1676	High Efficiency Bi-Directional Converter for Flywheel Energy Storage Application	2016
77	EEE1677	Secondary-Side-Regulated Soft-Switching Full-Bridge Three-Port Converter Based on Bridgeless Boost Rectifier and Bidirectional Converter for Multiple Energy Interface	2016
78	EEE1678	A Triple Active Bridge DC-DC Converter Capable of Achieving Full-Range ZVS	2016
79	EEE1679	Analysis, Design, Modeling and Control of an Interleaved-Boost Full-Bridge Three Port Converter for Hybrid Renewable Energy Systems	2016
80	EEE1680	An Interleaved Half-Bridge Three-Port Converter With Enhanced Power Transfer Capability Using Three-Leg Rectifier for Renewable Energy Applications	2016

81	EEE1681	Control and Implementation of a Standalone Solar Photo-Voltaic Hybrid System	2016
82	EEE1682	Design and Real-Time Controller Implementation for a Battery-Ultra-capacitor Hybrid Energy Storage System	2016
83	EEE1683	Grid-Connected PV-Wind-Battery based Multi-Input Transformer Coupled Bidirectional DC-DC Converter for household Applications	2016
84	EEE1684	Ultra-capacitor-Battery Hybrid Energy Storage System Based on the Asymmetric Bidirectional Z-Source Topology for EV	2016
85	EEE1685	An Optimal Method to Design a Trap-CL Filter for a PV AC-Module Based on Flyback Inverter	2016
86	EEE1686	Highly Efficient Asymmetrical PWM Full-Bridge Converter for Renewable Energy Sources	2016
87	EEE1687	A High-Efficiency Flyback Micro-inverter With a New Adaptive Snubber for Photovoltaic Applications	2016
88	EEE1688	A Single-Phase PV Quasi-Z-Source Inverter With Reduced Capacitance Using Modified Modulation and Double-Frequency Ripple Suppression Control	2016
89	EEE1689	High-Gain Single-Stage Boosting Inverter for Photovoltaic Applications	2016
90	EEE1690	Front-End Isolated Quasi-Z-Source DC-DC Converter Modules in Series for Photovoltaic High-Voltage DC Applications	2016
91	EEE1691	Bus Voltage Control With Zero Distortion and High Bandwidth for Single-Phase Solar Inverters	2016
92	EEE1692	Transformerless Photovoltaic Inverter Based on Interleaving High-Frequency Legs Having Bidirectional Capability	2016
93	EEE1693	Highly Reliable Transformerless Photovoltaic Inverters With Leakage Current and Pulsating Power Elimination	2016
94	EEE1694	Design and Analysis of a High Efficiency DC-DC Converter With Soft Switching Capability for Renewable Energy Applications Requiring High Voltage Gain	2016
95	EEE1695	Efficient Single Phase Transformerless Inverter for Grid-Tied PVG System With Reactive Power Control	2016
96	EEE1696	Single Phase Cascaded H5 Inverter with Leakage Current Elimination for Transformerless Photovoltaic System	2016
97	EEE1697	A Medium Frequency Transformer-Based Wind Energy Conversion System Used for Current Source Converter Based Offshore Wind Farm	2016
98	EEE1698	An Offshore Wind Generation Scheme With a High-Voltage Hybrid Generator, HVDC Interconnections, and Transmission	2016
99	EEE1699	Sliding Mode Control of PMSG Wind Turbine Based on Enhanced Exponential Reaching Law	2016
100	EEE16100	Control and Operation of a DC Grid-Based Wind Power Generation System in a Microgrid	2016
101	EEE15101	A Novel Control Method for Transformerless H-Bridge Cascaded STATCOM With Star Configuration	2015

102	EEE15102	A Phase-Shifted-PWM D-STATCOM Using a Modular Multilevel Cascade Converter (SSBC)—Part I: Modeling, Analysis, and Design of Current Control	2015
103	EEE15103	A Zero-Sequence Voltage Injection-Based Control Strategy for a Parallel Hybrid Modular Multilevel HVDC Converter System	2015
104	EEE15104	An Adaptive Power Oscillation Damping Controller by STATCOM With Energy Storage	2015
105	EEE15105	Analysis and Impacts of Implementing Droop Control in DFIG-Based Wind Turbines on Microgrid/Weak-Grid Stability	2015
106	EEE15106	Full-bridge Reactive Power Compensator with Minimized Equipped Capacitor and its Application to Static Var Compensator	2015
107	EEE15107	Minimization of the DC Component in Transformerless Three-Phase Grid-Connected Photovoltaic Inverters	2015
108	EEE15108	Modular Cascaded H-Bridge Multilevel PV Inverter with Distributed MPPT for Grid-Connected Applications	2015
109	EEE15109	Reactive Power Management in Islanded Microgrid—Proportional Power Sharing in Hierarchical Droop Control	2015