

PROJECT CODE	POWER ELECTRONICS & DRIVES
CTPED1	A Dc-Dc Converter with High Voltage Gain and Two Input Boost Stages
CTPED2	A Dual Series-Resonant DC-DC Converter
CTPED3	A Half-Bridge Doubler Boost Operating as AC-DC and DC-DC Converter
CTPED4	A Hybrid ZVZCS Dual-Transformer-Based Full-Bridge Converter Operating in DCM for MVDC Grids
CTPED5	High Step-Up Pwm Dc-Dc Converter Integrating Coupled-Inductor And Switched-Capacitor
CTPED6	A PV Micro-inverter with PV Current Decoupling Strategy
CTPED7	A Simple Sensorless Current Sharing Technique for Multiphase DC-DC Buck Converters
CTPED8	A Single-stage High Frequency Resonant AC/AC Converter
CTPED9	A Three-Winding Coupled-Inductor DC-DC Converter Topology with High Voltage Gain and Reduced Switch Stress
CTPED10	Active Suppression of Selected DC Bus Harmonics for Dual Active Bridge DC-DC Converters
CTPED11	Analysis, Design, Modeling, and Control of an Interleaved-Boost Full-Bridge Three-Port Converter for Hybrid Renewable Energy Systems
CTPED12	Analysis, Design And Implementation Of APWM ZVZCS Full Bridge DC-DC Converter For Battery Charging In Electric Vehicles
CTPED13	Experimental Evaluation of Internal Model Control Scheme on a DC-DC Boost Converter Exhibiting Non-minimum Phase Behavior
CTPED14	Wide Input-Voltage Range Boost Three-Level DC-DC Converter with Quasi-Z Source for Fuel Cell Vehicles
CTPED15	Direct Model Predictive Current Control Strategy of Quasi-Z-Source Inverters
CTPED16	A Multipurpose PV System Integrated to Three-Phase Distribution System Using LWDF Based Approach
CTPED17	Extension of Soft-Switching Region of Dual-Active-Bridge Converter by Tunable Resonant Tank
CTPED18	A Family of High-Frequency Single-Switch DC-DC Converters With Low Switch Voltage Stress Based on Impedance Networks
CTPED19	Feed-Forward based Control in a DC-DC Converter of Asymmetric Multistage Stacked Boost Architecture
CTPED20	Fireworks Enriched P&O Algorithm for GMPPT and Detection of Partial Shading in PV Systems

CTPED21	High Performance Predictive Control of Quasi Impedance Source Inverter
CTPED22	High-Efficiency Asymmetric Forward-Flyback Converter for Wide Output Power Range
CTPED23	High-Frequency-Link-Based Grid-Tied PV System With Small DC-Link Capacitor and Low-Frequency Ripple-Free Maximum Power Point Tracking
CTPED24	High-Performance Quasi-Z-Source Series Resonant DC-DC Converter for Photovoltaic Module Level Power Electronics Applications
CTPED25	Hybrid Z-Source Boost DC-DC Converters
CTPED26	Implementation of a 3.3-kW DC-DC Converter for EV On-Board Charger Employing Series-Resonant Converter with Reduced-Frequency-Range Control
CTPED27	Isolated Bidirectional Grid-Tied Three-Phase AC-DC Power Conversion using Series Resonant Converter Modules and a Three-Phase Unfolder
CTPED28	A New Class of Single-Phase High-Frequency Isolated Z-Source AC-AC Converters with Reduced Passive Components
CTPED29	Photovoltaic Module Integrated Standalone Single Stage Switched Capacitor Inverter with Maximum Power Point Tracking
CTPED30	Quasi-Z-Source Indirect Matrix Converter Fed Induction Motor Drive for Flow Control of Dye in Paper Mill
CTPED31	A Highly Reliable and High Efficiency Quasi Single-Stage Buck-Boost Inverter
CTPED32	Single-Stage Three-Phase Grid-Tied PV System with Universal Filtering Capability Applied to DG Systems and AC Microgrids
CTPED33	Electric Vehicle Charging Station with an Energy Storage Stage for Split-DC Bus Voltage Balancing
CTPED34	Unit Prediction Horizon Binary Search-Based Model Predictive Control of Full-Bridge DC-DC Converter
CTPED35	Voltage Controlled Capacitor – Feasibility Demonstration in Dc-Dc Converters
CTPED36	Zero-Voltage Transition Interleaved Boost Converter with an Auxiliary Coupled Inductor
CTPED37	A Family of High-Frequency Isolated Single-Phase ZS AC-AC Converters with Safe-Commutation Strategy
CTPED38	A New Hybrid Boosting Converter (HBC) for Renewable Energy Applications
CTPED39	A Power Quality Improved Bridgeless Converter Based Computer Power Supply
CTPED40	A Three Phase Hybrid Cascaded Modular Multilevel Inverter for Renewable Energy Environment
CTPED41	An Active Power Factor Correction Technique for Bridgeless Boost AC-DC Converter
CTPED42	Current Controller Modeling for an Interleaved Boost with Voltage Multiplier Cells for PV Applications

CTPED43	DC to Single-phase AC Voltage Source Inverter with Power Decoupling Circuit based on Flying Capacitor Topology for PV System
CTPED44	High Performance Predictive Control of Quasi Impedance Source Inverter
CTPED45	Implementing a Single-Phase Quasi-Z-Source Inverter with the Indirect Current Control Algorithm for a Reconfigurable PV System
CTPED46	Independent DC Link Voltage Control of Cascaded Multilevel PV Inverter
CTPED47	Isolated Double Step-down DC-DC Converter with Improved ZVS Range and No Transformer Saturation Problem
CTPED48	Interleaved SEPIC Power Factor Pre-Regulator Using Coupled Inductors in Discontinuous Conduction Mode with Wide Output Voltage
CTPED49	A Single-Stage Single-Switch LED Driver Based on Class-E Converter
CTPED50	Model Predictive Based Maximum Power Point Tracking for Grid-tied Photovoltaic Applications Using a Z-Source Inverter
CTPED51	Quasi-Z-Source Modular Cascaded Converter for High-Power Photovoltaic System
CTPED52	Single-Phase Grid Connected Motor Drive System with DC-link Shunt Compensator and Small DC-link Capacitor
CTPED53	Single-stage Three-phase Differential-mode Buck-Boost Inverters with Continuous Input Current for PV Applications
CTPED54	Three-Phase LLC Series Resonant DC/DC Converter Using SiC MOSFETs to Realize High-Voltage and High-Frequency Operation
CTPED55	An Embedded Closed-Loop Fault-Tolerant Control Scheme for Nonredundant VSI-fed Induction Motor Drives
CTPED56	A Single-stage High Frequency Resonant AC/AC Converter
CTPED57	An Improved Control Technique of Switching-Frequency-Modulated Power Factor Correctors for Low THD and High Power Factor
CTPED58	An Improved Single-Phase Direct PWM Inverting Buck-Boost AC-AC Converter
CTPED59	Single-Stage Three-Phase AC-AC Matrix Converter for Inductive Power Transfer Systems
CTPED60	A Family of High-Frequency Isolated Single-Phase ZS AC-AC Converters with Safe-Commutation Strategy
CTPED61	A Flyback AC/DC Converter Using Power Semiconductor Filter for Input Power Factor Correction
CTPED62	A Novel High step-up converter with a quasi active switched-inductor structure for renewable energy systems
CTPED63	A Novel Transformer-less Interleaved Four-Phase Step-down DC Converter with Low Switch Voltage Stress and Automatic Uniform Current Sharing Characteristics
CTPED64	Active Power Decoupling Method for Single-Phase Current Source Rectifier with No Additional Active Switches

CTPED65	DCM-based Zero-Voltage Switching Control of a Bidirectional DC-DC Converter With Variable Switching Frequency
CTPED66	Design, Hardware Implementation and Performance analysis of conventional SEPIC Converter for Photovoltaic System Applications
CTPED67	Coupled Inductors in Interleaved Multiphase Three-level DC-DC Converter for High Power Applications
CTPED68	Development of 2-kW interleaved DC-capacitor-less single-phase inverter system
CTPED69	Performance Analysis of Carrier-Based Discontinuous PWM Method for Vienna Rectifiers with Neutral-Point Voltage Balance
CTPED70	Efficient Transformerless MOSFET Inverter for Grid-Tied Photovoltaic System
CTPED71	Flying-Capacitor based Hybrid LLC converters with input voltage auto-balance for high voltage applications
CTPED72	Modulation Scheme for Three-Phase Differential-Mode Cuk Inverter
CTPED73	Partial Shading Detection and Smooth Maximum Power Point Tracking of PV Arrays under PSC
CTPED74	Power Factor Correction in BLDC motor Drives Using DC-DC Converters
CTPED75	Selective Voltage Noise Cancellation In Three-Phase Inverter Using Random SVPWM
CTPED76	Soft-Switching Two-Switch Resonant AC-DC Converter with High Power Factor
CTPED77	Synchronized Space Vector PWM for Three Level VSI with Lower Harmonic Distortion and Switching Frequency
CTPED78	Control strategy for Single-phase Transformerless Three-leg Unified Power Quality Conditioner Based on Space Vector Modulation
CTPED79	Advanced Integrated Modeling and Analysis for Adjustable Speed Drives of Induction Motors Operating With Minimum Losses
CTPED80	A Bidirectional LLC Resonant Converter With Automatic Forward and Backward Mode Transition
CTPED81	A High Gain Input-Parallel Output-Series DC/DC Converter With Dual Coupled Inductors
CTPED82	A New Interleaved Three-Phase Single-Stage PFC AC-DC Converter With Flying Capacitor
CTPED83	A New Resonant Modular Multilevel Step-Down DC-DC Converter with Inherent-Balancing
CTPED84	Speed Sensor less Vector Controlled Induction Motor Drive Using Single Current Sensor

CTPED85	A Quasi-Z-Source Direct Matrix Converter Feeding a Vector Controlled Induction Motor Drive
CTPED86	A Simple Average Current Control With On-Time Doubler for Multiphase CCM PFC Converter
CTPED87	A Single-Phase Current-Source PV Inverter With Power Decoupling Capability Using an Active Buffer
CTPED88	A Single-phase PV Quasi-Z-source Inverter with Reduced Capacitance using Modified Modulation and Double-Frequency Ripple Suppression Control
CTPED89	A Single-Phase Rectifier Having Two Independent Voltage Outputs With Reduced Fundamental Frequency Voltage Ripples
CTPED90	A Switching Control Strategy for Single- and Dual-Inductor Current-Fed Push–Pull Converters
CTPED91	An Input-Adaptive Self-Oscillating Boost Converter for Fault-Tolerant LED Driving With Wide-Range Ultralow Voltage Input
CTPED92	An Interleaved High-Power Flyback Inverter for Photovoltaic Applications
CTPED93	Torque-Ripple Mitigation For Machine Drive System Using Average Torque Control
CTPED94	Automatic Resonant Frequency Tracking in Parallel LLC Boost DC–DC Converter
CTPED95	Automatic Tuning of Cascaded Controllers for Power Converters Using Eigenvalue Parametric Sensitivities
CTPED96	Average Modelling of Medium Frequency DC–DC Converters in Dynamic Studies
CTPED97	Bidirectional Current-Fed Resonant Inverter for Contactless Energy Transfer Systems
CTPED98	Bidirectional Soft-Switching Series AC-Link Inverter
CTPED99	A BL-CSC Converter-Fed BLDC Motor Drive With Power Factor Correction
CTPED100	Bridgeless PFC-Modified SEPIC Rectifier With Extended Gain for Universal Input Voltage Applications
CTPED101	Carrier-Based Discontinuous PWM Method for Vienna Rectifiers
CTPED102	Comprehensive Modeling of Single-Phase Quasi-Z-Source Photovoltaic Inverter to Investigate Low-Frequency Voltage and Current Ripple
CTPED103	Dead-Time Compensation Method Based on Current Ripple Estimation
CTPED104	Decoupling of Fluctuating Power in Single-Phase Systems Through a Symmetrical Half-Bridge Circuit

CTPED105	Switched-Capacitor Inverter Using Series/Parallel Conversion With Inductive Load
CTPED106	Double-Phase High-Efficiency, Wide Load Range High- Voltage/Low-Voltage LLC DC/DC Converter for Electric/Hybrid Vehicles
CTPED107	An Electrolytic-Capacitor-Free Single-Phase High-Power Fuel Cell Converter With Direct Double-Frequency Ripple Current Control
CTPED108	Energy Feed-Forward and Direct Feed-Forward Control for Solid-State Transformer
CTPED109	Extended Boost Active-Switched-Capacitor/ Switched-Inductor Quasi-Z-Source inverters
CTPED110	A Family of Soft-Switching DC–DC Converters Based on a Phase-Shift-Controlled Active Boost Rectifier
CTPED111	Filter Capacitor Minimization in a Flyback LED Driver Considering Input Current Harmonics and Light Flicker Characteristics
CTPED112	A Hybrid Filter for the Suppression of Common-Mode Voltage and Differential-Mode Harmonics in Three-Phase Inverters With CPPM
CTPED113	A Four-Switch Three-Phase SEPIC-Based Inverter
CTPED114	A High Step-Up DC to DC Converter Under Alternating Phase Shift Control for Fuel Cell Power System
CTPED115	High Step-Up Interleaved Forward-Flyback Boost Converter With Three-Winding Coupled Inductors
CTPED116	High-Gain Resonant Switched-Capacitor Cell-Based DC/DC Converter for Offshore Wind Energy Systems
CTPED117	High-Input-Voltage High-Frequency Class E Rectifiers for Resonant Inductive Links
CTPED118	Hybrid-Type Full-Bridge DC/DC Converter With High Efficiency
CTPED119	Modular-Cell Inverter Employing Reduced Flying Capacitors With Hybrid Phase-Shifted Carrier Phase-Disposition PWM
CTPED120	A Multilevel Energy Buffer and Voltage Modulator for Grid-Interfaced Microinverters
CTPED121	Multi objective Optimization and Topology Selection for a Module-Integrated Inverter
CTPED122	New Interleaved Current-Fed Resonant Converter With Significantly Reduced High Current Side Output Filter for EV and HEV Applications