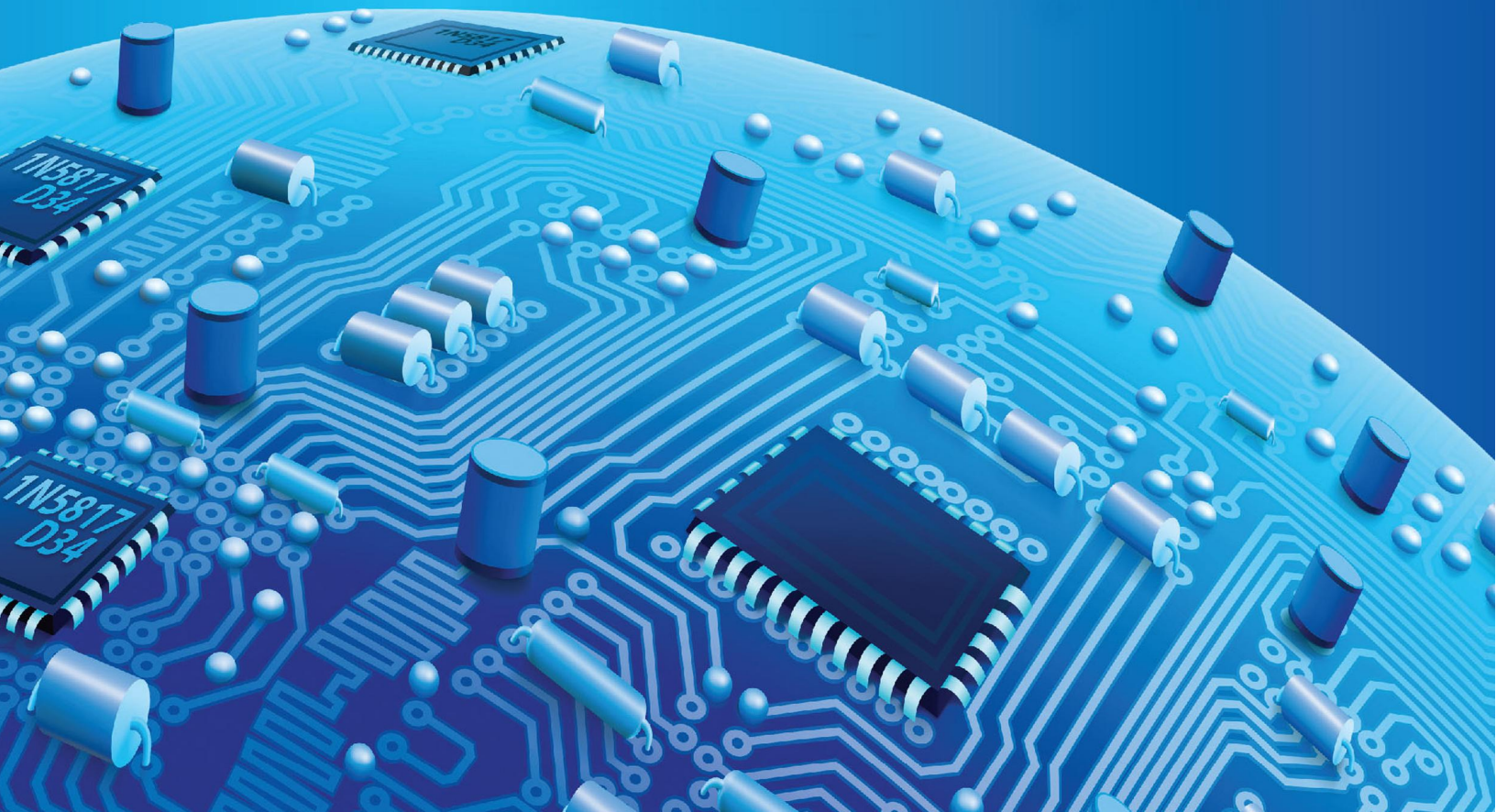




SPIRO
SOLUTIONS PVT LTD

**COMMUNICATION
PROJECT TITLE
2017 - 2018**



MATLAB COMMUNICATION TITLES 2017-2018

ORTHOGONAL FREQUENCY-DIVISION MULTIPLEXING(OFDM)			
S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM01	New PTS Schemes For PAPR Reduction Of OFDM Signals Without Side Information	2017
2	ITCM02	Design Space-Time Trellis Coded Inter-Carrier Interference Parallel Cancellation Architectures for OFDM Systems	2017
3	ITCM03	Full Duplex Delay Diversity Relay Transmission Using Bit-Interleaved Coded OFDM	2017
4	ITCM04	Pilot Optimization For Estimation Of High-Mobility OFDM Channels	2017
5	ITCM05	Electromagnetic Emission-aware Scheduling for the Uplink of Multi-cell OFDM Wireless Systems	2017
7	ITCM06	OFDM receiver for fast time-varying channels using block-sparse Bayesian learning	2016
6	ITCM07	Beam forming OFDM Performance under Joint Phase Noise and I/Q Imbalance	2016
8	ITCM08	Low-Complexity Modem Design for GFDM	2016
COGNITIVE RADIO NETWORK(CRN)			
S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM09	Optimal Eigenvalue Weighting Detection for Multi-Antenna Cognitive Radio Networks	2017
2	ITCM10	On Secure Underlay MIMO Cognitive Radio Networks with Energy Harvesting and Transmit Antenna Selection	2017

3	ITCM11	Secure Communication in OFDMA Based Cognitive Radio Networks: An Incentivized Secondary Network Coexistence Approach	2017
4	ITCM12	Design of Cooperative Non-Orthogonal Multicast Cognitive Multiple Access for 5G Systems: User Scheduling and Performance Analysis	2017
5	ITCM13	Spectrum Sensor Employing Continuous Pilot Tones in Cognitive Radio Systems	2017
6	ITCM14	Antenna Selection For Dual-Hop Cognitive Radio Networks: A Multiple-Relay Scenario	2017
7	ITCM15	Interference Efficiency: A New Metric to Analyze the Performance of Cognitive Radio Networks	2017
8	ITCM16	Sniffer Channel Assignment with Imperfect Monitoring for Cognitive Radio Networks	2016
9	ITCM17	Low Complexity Energy Detection for Spectrum Sensing with Random Arrivals of Primary Users	2016
10	ITCM18	Outage Performance of Cognitive Relay Networks with Wireless Information and Power Transfer	2016
MUTIPLE INPUT MUTIPLE OUTPUT(MIMO)			
S.NO	PROJEC T CODE	PROJECT TITLES	YEAR
1	ITCM19	Precoding for MIMO Channels in Cognitive Radio Networks With CSI Uncertainties and for Compound Capacity	2017
2	ITCM20	A Scalable Framework for CSI Feedback in FDD Massive MIMO via DL Path Aligning	2017
3	ITCM21	Scalable Source Transmission with Unequal Frequency Reuse in MIMO Cellular Networks	2017

4	ITCM22	Dynamic User Grouping and Joint Resource Allocation with Multi-Cell Cooperation for Uplink Virtual MIMO Systems	2017
5	ITCM23	New Beamforming Designs for Joint Spatial Division and Multiplexing in Large-Scale MISO Multi-user Systems	2017
6	ITCM24	BER Analysis for Spatial Modulation in Multicast MIMO Systems	2016
7	ITCM25	Performance Analysis of Dual-Hop MIMO AF Relaying Network with Multiple Interferences	2016
8	ITCM26	Performance Evaluation of Best Path Selection in a Multi-Hop Decode-and-Forward Cooperative System	2016
9	ITCM27	New Results on Transceiver Design for Two-hop Amplify-and-forward MIMO Relay Systems with Direct Link	2016

OPTICAL COMMUNICATION

S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM28	Optical MIMO-OFDM with Generalized LED Index Modulation	2017
2	ITCM29	PAPR Reduction for Hybrid ACO-OFDM Aided IM/DD Optical Wireless Vehicular Communications	2017
3	ITCM30	Performance of Wireless Optical Communication In S-Distributed Turbulence	2016

RELAY-COMMUNICATION

S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM31	Energy Efficiency Maximization Precoding Design for SWIPT in MIMO Two-Way Relay Networks	2017
2	ITCM32	Joint Transceiver Design for Secure Downlink Communications over an Amplify-and-Forward MIMO Relay	2017
3	ITCM33	A Near BER-Optimal Decoding Algorithm for Convolutional Coded Relay Channels with the Decode-and-Forward Protocol	2017

SATELLITE COMMUNICATION

1	ITCM34	A Novel Beam forming and Combining Scheme for Two-Way AF Satellite Systems	2016
2	ITCM35	Channel Estimation and Detection in Satellite Communication Systems	2016

