

Sciencetech TechBooks are compact and user friendly learning platforms to provide a modern, portable, comprehensive and practical way to learn Technology. Each TechBook is provided with detailed Multimedia learning material which covers basic theory, step by step procedure to conduct the experiment and other useful information.

Sciencetech TechBook 2808 provides an extensive hands on learning on QPSK, OQPSK, DQPSK Modulator & Demodulator.

Features

- **Personalized Learning platform**
- **On-board four variable line speed rates and single bit data pattern.**
- **On board DDS technology based Carrier Generator**
- **SMD LED indicators**
- **Can be issued just like a book for hands-on learning**

Technical Specifications

Modulation & Demodulation

Techniques	: QPSK , OQPSK , DQPSK
Internal Data Generator	: Digital data
Data Pattern	: 8-Bit , 16-Bit , 32-Bit , 64-Bit
Frequency	: 2KHz, 4KHz, 8KHz, 16KHz
Internal Carrier Generator	: Direct Digital Synthesized
Carrier Signal	: Sine, Cosine
SMD LED Indicators	: 25 nos. for Digital data selection, data frequency selection and technique selection
Number of Test Points	: 57 nos.
Crystal Frequency	: 8MHz
Selection Mode	: Push switches
Dimensions (mm)	: W 326 x D 252 x H 52
Power Supply	: 110V - 260V AC, 50/60Hz
Weight	: 1.5Kg (approximately)
Operating Condition	: 0-40°C, 85% RH
Product Tutorial	: Online on www.SciencetechLearning.com
Included accessories	: 2mm Patchcord - 1no. Power Supply module- 1no.

Scope of Learning (with experimentation)

Quadrature Phase Shift Keying Modulation and Demodulation

Study and analysis of:

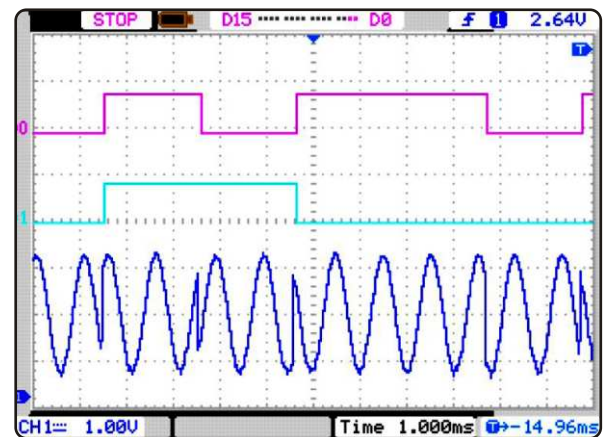
- QPSK Modulation and Demodulation with variable bit pattern and frequency.
- 2 bit encoding as I-Channel & Q-Channel encoding and decoding.
- Integrator and Comparator at the Demodulator end.

Offset Quadrature Phase Shift Keying Modulation and Demodulation

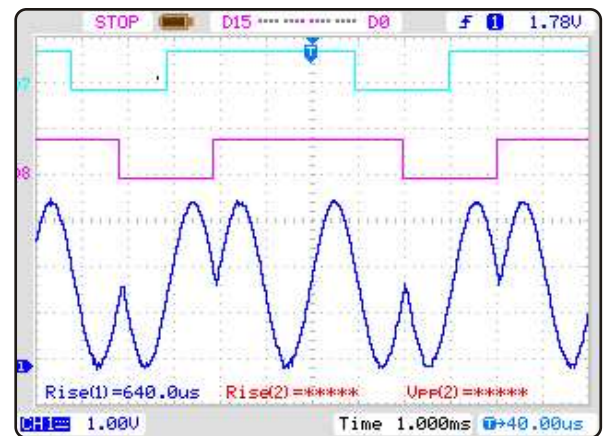
- OQPSK Modulation and Demodulation with variable bit pattern and frequency.
- 2 bit encoding as I- Channel & Q-Channel encoding and decoding.
- Offset encoding and decoding.
- Integrator and Comparator at the Demodulator end.

Differential Quadrature Phase Shift Keying Modulation and Demodulation

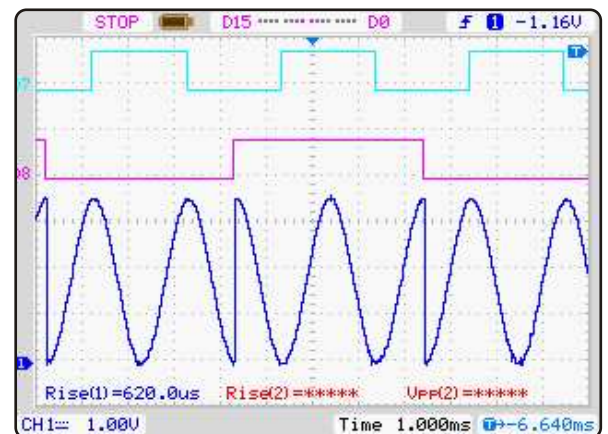
- DQPSK Modulation and Demodulation with variable bit pattern and frequency.
- 2 bit encoding as I-Channel & Q-Channel encoding and decoding.
- Differential encoding and decoding.
- Integrator and Comparator at the Demodulator end.



QPSK



OQPSK (Q-Channel)



DQPSK (I-Channel)