

## MCU for Optical Digital Diagnostic Monitor

### 1. Introduction

#### 1.1 General Description

The i7898 controls and monitors all functions for SFP+ modules including all SFF-8472 functionality. The combination of the i7898 with the GN1157/1158 1.0 to 11.3Gb/s Multi-Rate LR/SR Transceiver Chips supports VCSEL and DFB/FP solutions. The device provides APC loop, modulation current control, and eye safety functionality.

The i7898I is packaged in 16 pin TSSOP.

The i7898N is packaged in 20 pin QFN 4x4.

#### 1.2 Applications

- Optical Transceiver
- Diagnostic Monitoring

#### 1.3 Ordering Information

Part No.	Package
i7898I	16-pin TSSOP
I7898N	20-pin QFN 4x4

#### 1.4 Features

- Meets All SFF-8472 Control and Monitoring Requirements
- Single +3.3V Power Supply
- Five Monitored Channels (Temperature, V<sub>CC</sub>, MON1, MON2, MON3) Support Internal and External Calibration
- 2-Wire Master to Communicate with the GN1157/1158 1.0 to 11.3Gb/s Multi-Rate LR/SR Transceiver Chip
- Polling the Alarm and Warning Flags and Operation Parameter of the GN1157/1158 from the Local Register
- Two Level Password Scheme Provides Three Levels of Security
- Provides All Optional and Required SFF-8472 MSA EEPROM (Both A0h and A2h Memory)
- I<sup>2</sup>C-Compatible Serial Interface

#### 2.1. Pin Configuration

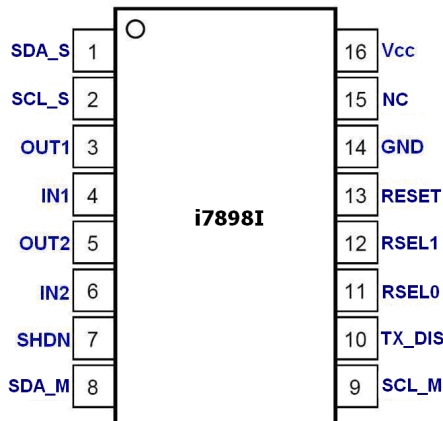


Figure1.1 i7898I TSSOP 16 configuration

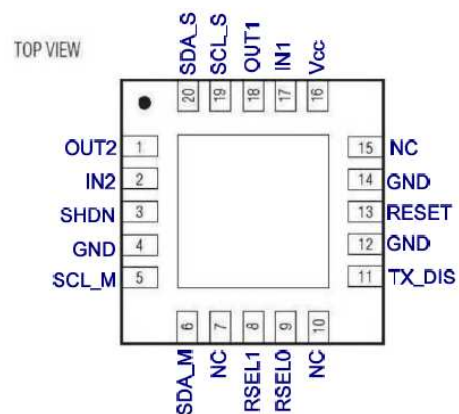


Figure1.2 i7898N QFN 20 configuration