

# DE8681

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### Demonstration and Evaluation kit for CMX865/A, CMX867/A, CMX868/A ICs

The DE8681 Demonstration kit is a reference design for the CMX865A DTMF Codec/FSK combo, CMX867A Low Power V.22 modem and CMX868A V.22bis modem IC.

On the main "socket-type modem" section it also contains the line interface components and a Flash PIC  $\mu$ C. Attached to the main section are two break-off sections which contain a 9-pin D type socket for PC serial communications, a Flash PIC programming connector, an RJ11 line connector and various LEDs for indicating signal activity.

### **Features**

- CMX868A-Based DAA Reference Design
- Fully Isolated Two-Wire Line Interface
- Opto-isolated 'Ring-Detect' Circuitry and OptoMOS 'Hook Relay'
- 'AT' Command Compatible Firmware
- On-Board Flash Compatible Firmware
- PC Controlled via Terminal Emulator
- DAA Compliant to FCC 68 and CTR21
- Single 3V or 5V Requirement
- 'Break-Off' PCB Section Provides Full-Feature 'Socket-type' Modem
- Supplied with Manual, Circuit Diagrams, Software and PCB Layout Data

### **Applications**

 Evaluation, Demonstration and Investigation of CMX865, CMX867/A and CMX868/A Wireline Modem ICs

### **Supply Requirement**

• 3 Vdc or 5Vdc

For further information, please refer to the 'Design Resources' section on the CMX865/A, CMX867/A, CMX868/A product page(s) at cmlmicro.com AT Commands are used to control the demonstration board via a standard terminal emulator program running on a host PC.

Interfacing to the Demonstration Board can be via socket pins on the socket modem section, or via the connectors provided on the break-off sections. The board can be operated at 3V or 5V dc, which must be provided by an external, regulated power supply.

The PCB has been laid out for both CTR21 and FCC68 compliant DAA designs. However the components fitted are for the simplified FCC68 design.

Instructions are given for users who wish to fit the CTR21 components. Hardware has been provided on the socket modem section for CLI Type 1, but a PIC firmware upgrade will be required to enable this function, which may be available at a later date.

With this is mind, the socket modem has been provided with a Flash PIC Microcontroller that can be serially programmed in circuit via the RS232 connection.



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