

KEIC Single Chip Encoder

Incorporate the Keyboard Encoder Function into your own Design

The KEIC is available as a 40 pin DIP or 44 pin PLCC.

The KEIC product provides the user with a single chip device that can be incorporated into their own design. The device requires minimal support circuitry as demonstrated on the sample schematic.

The KEIC is a custom product and is configured by Hagstrom Electronics, Inc. for the user's application. The following list itemizes the information required to set up the KEIC for an application.

- 1) Define which scan lines are Rows and which are Columns in the user's matrix. Although the KEIC sample schematic shows Rows and Columns assigned to specific pins, any of the scan lines can be either a Row or Column, or even an individual input.
- 2) Specify the keystroke to be emulated for each position in the matrix or input. The KEIC can also produce Macro sequences. With a Macro, a single input can generate a multi-key sequence such as CTRL+F1, etc.
- 3) Fax or email the information to us with your order. We typically have your devices ready in less than one week!

Note that the KEIC can also be used in a serial port mode. In this mode, pins 10 and 11 of the KEIC are not available for scanning a matrix. Pin 10 is the logic level receive, and pin 11 is the logic level transit. The user can select the appropriate level driver for the application (RS-232, RS-485, etc.).

The KEIC support circuitry includes an 11.0592 Mhz crystal, two 33pf capacitors, and various pull-up resistors. The user must also supply a logic level reset the KEIC on power up (100 msec to 500 msec duration).

The level of customization that we provide for the KEIC is diverse. Hagstrom Electronics, Inc. can add other functions to the KEIC based on your requirements. For example, we can add LCD interfaces, parallel interfaces, and mouse interfaces, to name a few. Let us know what other capabilities you might need in your KEIC.

Schematic of typical KEIC Implementation and Support Circuitry (PC Compatible)

