

Host-to-PHCC Protocol

The Host-to-PHCC Protocol is parsed by a State Machine in the PIC and therefore light and easy to process.

The initial State is 'IDLE' and from this state the other 'main' states can be reached.

Keyboard scanning and analog-to-digital conversion for the analog-in channels is done on timer interrupts.

Start/Stop Talking enables/disables the notification on changes in the keymatrix inputs or changes of the analog values.

Analog Map and Keymatrix Map allows the Host to inquire PHCC about the current state of all analog/keymatrix inputs respectively. PHCC will send a full 'map' of analog channel or keymatrix input.

Table of Commands (or 'main' States):

cmd byte	Meaning
0x00	IDLE
0x01	RESET
0x02	Start Talking
0x03	Stop Talking
0x04	Keymatrix Map
0x05	Analog Map
0x06	I2C Send
0x07	DOA Send
0x08	DOB Send

