Quick start for 6809 Microprocessor kit

1. Memory layout

0000-7FFF	RAM
8000	GPIO1 LED
8001	PORT0 input port
8002	PORT1 output port
8003	PORT2 output port
9000-9003	LCD registers
A000-A001	ACIA 6850
B000-BFFF	User expansion
C000-FFFF	Monitor ROM

2. Interrupt vectors: SWI is used by monitor program for software break point.

Below interrupts are relocated from ROM to RAM location. For example, NMI, CPU will jump to location 7FF3.

NMI	7FF3
IRQ	7FF0
FIRQ	7FF6

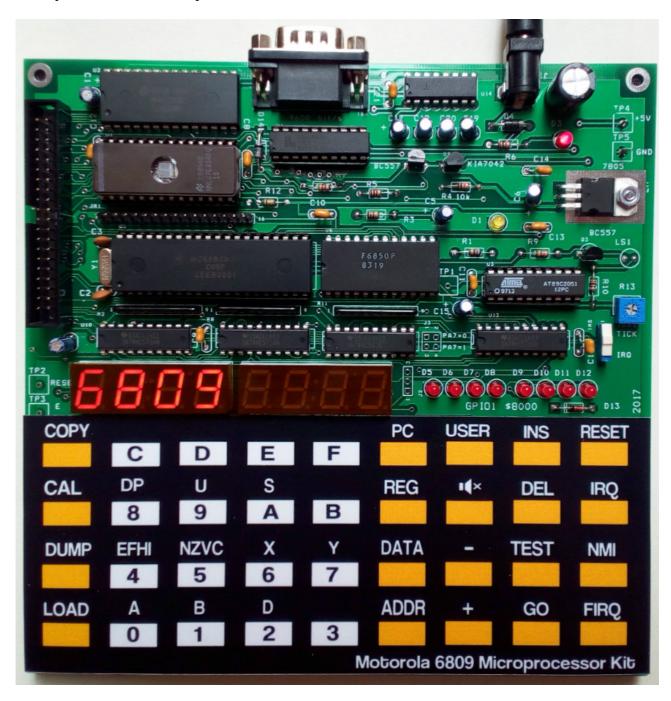
3. Function keys:

СОРУ	Enter Start, End and Destination used with key + and GO
CAL	Hex calculator, compute addition (key+) or subtraction (key -) and GO
DUMP	Display hex contents on 19200 bit/s terminal.
LOAD	Load Motorola S19 record. Need 1ms character delay. Tested with tera terminal 19200 bit/s
REG	Set display user registers.
PC	Set display address to 200
INS	Insert one byte and shift 512 bytes down
DEL	Delete one byte and shift 512 bytes up
TEST	Test 10ms tick, SW1 must set to 10ms tick
GO	Jump from monitor program to user code
USER	User key, see monitor source code key_exe()

4. Install LCD must be done when the kit is POWER OFF!

More information: http://www.kswichit.com/6809/6809.htm

Build your own 6809 Microprocessor Kit



Contact: wichit.sirichote@gmail.com