## COUNTER F2030

The schematic of this circuit is counter of events based on a microcontroller MC68HC908QT.

As input has tree switches, or external TTL compatible inputs:

SW0 for reset counter to zero state: 00000.

SW1 for increment counter with count of events.

SW2 for select displayed decimal points with select brightness level of display with next available states:

00000

00000.

0000.0

000.00

00.000

0.0000

0000.0.

0.0.0.0.0.

As output has display driver with serial interface MC14489 and multiplexed display with five BCD digits, which is consist from five low current, seven segment LED displays with common cathode HP HDSP-A103.

External resistor R1 uses for setting constant current for each segment of LED display.

External capacitors C1 and C2 are bypass capacitors.

This counter powered by single +5V power source and suite in most industrial process control and monitoring applications.

Reference:

MC68HC908QY4/D Motorola M68HC08 microcontrollers data sheet for MC68HC908QY4/2/1 and MC68HC908QT4/2/1.

MC14489/D Motorola multi-character LED display/lamp driver data sheet for MC14489.

