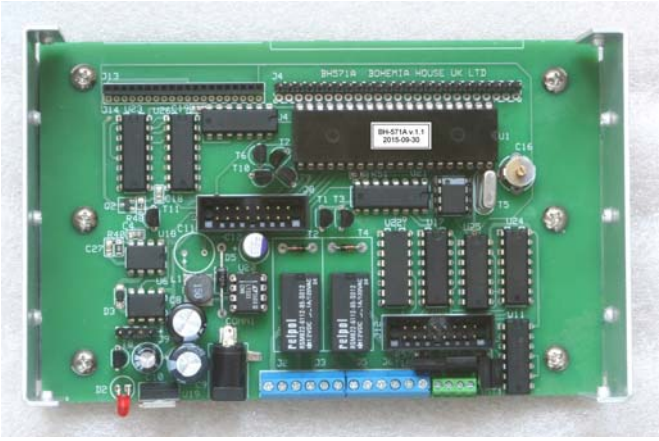
BH571M
Timing Generator & Digital Clock

Bohemia House UK Ltd

Introduction
Most laboratory systems today requires a timing capability like time of day, time intervals, etc. The time data are used for scheduling measurement, logging data, initiating laboratory measurement on a periodic basis, sequence of laboratory processes and much more.

The timing generator and digital clock module is versatile and generally useful module for any laboratory and industry workshop instrument.

FEATURES:
- crystal based source signal
- ten different timing signals
- integrated logic array 4/6 digits digital clock
- two relay outputs
- power H-bridge output
- remote controlled setting
- battery backup
- various displays possible
- network interface (option)
- +5V DC or +6V ... +12V DC operation



ORDER CODE:

BH 571M	module, power supply +6 ... +12V DC
BH 571M-5	module, power supply +5 DC

DESCRIPTION:
The BH571M is an embedded timing generator module equipped with logic array digital clock. It can be ordered with or without display. The source for timing generator is precision crystal oscillator. The digital clock has selectable 4 or 6 digits and 12 or 24 hours mode. The clock output is non-multiplexed available for direct driving display and various microcontroller interfaces.
The module has two power relay timer outputs and one power H-bridge output.
The module can be powered either from non-stabilized DC power supply in range 6V … 12V or from stabilized +5V DC line and backuped with NiMH 2700 mWatt battery. A battery charger and changeover are part of the module.

TIMING SIGNALS CONNECTOR:
Timing signals connector (J12) is a 16-pin flat cable connector or header. There are available ten various timing signals from ¼ sec to 16 min, two relay status signals and H-bridge control signals.

REMOTE CONTROL CONNECTOR:
Remote Control Connector (J8) is a 16-pin flat cable connector or header. Over this connector is possible to set the digital clock and both timers with relay outputs. On this connector is RESET signals and power supply for option boards,

TIME SIGNALS CONNECTOR:
The module has three time output connectors (J4, J13, J14) where are time signals available for display and/or interface board. The time output signals are non-multiplexed with CMOS level. Signals are available also in battery backup mode. The module can drive various kind of displays, like LED, VFD, LCD.

RELAY OUTPUT:
The module has two timer power DPDT relay. All six contacts from each relay are connected to terminal. The relay can switch 230V AC.

H-BRIDGE OUTPUT:
The module has one H-bridge output connected to terminal. Power supply for H-bridge is from external source, max. 60 Volt. The output transistors in H-bridge switch max. 2A current pulses.

ABSOLUTE MAXIMUM RATINGS:

Ambient temperature ..... 0°C to +70°C
Storage temperature ..... -55°C to +150°C
Supply Voltage (BH571M) ..... 12V DC
Supply Voltage (BH571M-5) ..... 5.5V DC
Total power dissipation ..... 1.5 Watt

RECOMMENDED OPERATING CONDITIONS:
(All voltages referenced to V_{SS}, T_A = 0°C to 70°C.)

PARAMETER	SYMBOL	MIN	MAX	UNITS	CONDITION
Supply voltage	V_{DD}	6.5	12	V	BH571M
Supply voltage	V_{DD}	4.5	5.5	V	BH571M-5
Battery backup time	T		300	hrs	

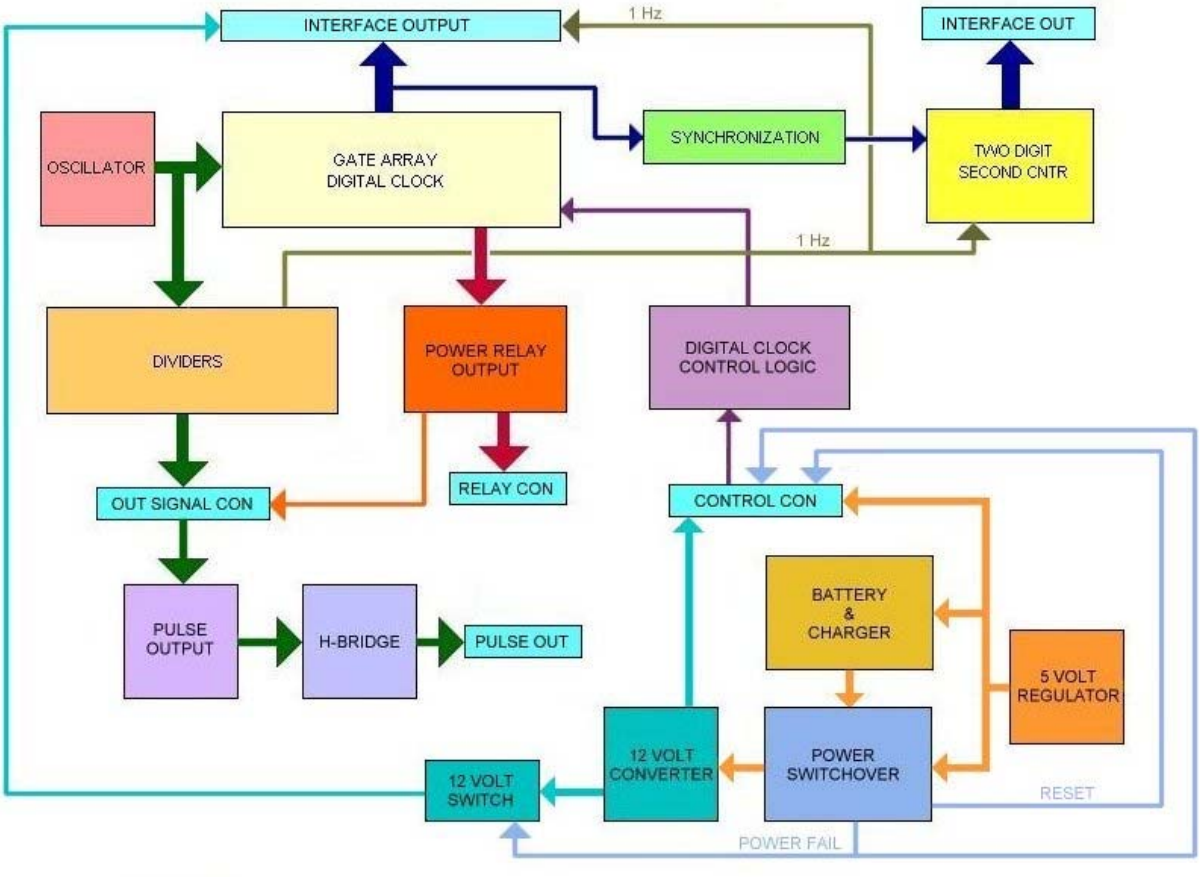


Figure 1 – BH571A block schematics