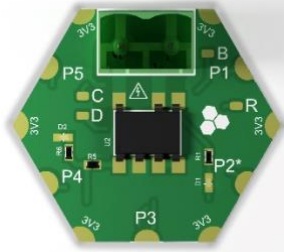




H09R00 AC Solid-state Relay

Industrial

Technical Specifications



Top (1:1)



Bottom (1:1)

- Five array ports and six power ports (+3.3V and GND).
- Access to 5xUART, 2xI²C, SWD, BOOT0, RESET.
- Panasonic AQH3213ARGB solid-state relay (SSR):
 - 600 V AC peak OFF-state voltage.
 - 1.2 A ON-state RMS current.
 - 100 µsec maximum turn-on time.
 - Zero-crossing detection.
- Yellow indication LED for SSR state.
- SSR load connector: TE Connectivity/AMP 2-position 5.08mm shrouded header.
- STM32F091CBU6 MCU.
- 8MHz external oscillator.

Available colors: 

Commands *use with any serial terminal software*

`command parameter1 parameter2 ...`

`on timeout`

Turn SSR on with a *timeout* (ms). Use `portMAX_DELAY = 0xFFFFFFFF` for indefinite timeout.

`off`

Turn SSR off.

`toggle`

Toggle SSR.

`ledmode mode`

SSR indicator LED *mode* (ON, OFF).

`pwm dutycycle`

Control SSR with a 24 KHz PWM signal with % *dutycycle* (0–100).

Examples

```
ledmode on
on 60000
```

Messages *for inter-array communication*

`code, parameter1 [value], parameter2 [value],`

`CODE_H09R0_ON, timeout`

`CODE_H09R0_OFF`

`CODE_H09R0_TOGGLE`

`CODE_H09R0_PWM, dutycycle`

Examples

```
// Timeout 10 seconds
messageParams[0] = (uint8_t)(10000>>24);
messageParams[1] = (uint8_t)(10000>>16);
messageParams[2] = (uint8_t)(10000>>8);
messageParams[3] = (uint8_t)(10000);

SendMessageToModule(BOS_BROADCAST,
CODE_H09R0_ON, 4);
```

APIs *getting your hands dirty!*

`output API_function(inputs)`

`H09R0_Status SSR_on(uint32_t timeout)`

`H09R0_Status SSR_off()`

`H09R0_Status SSR_toggle()`

`H09R0_Status SSR_PWM()`

Examples

```
SSR_PWM(50);
SSR_off(); SSR_on(10000);
```

