H05R00 Micro-SD Card

Data Storage

Technical Specifications

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Bottom (1:1)

- Five array ports and four power ports (+3.3V and GND).
- Access to 5xUART, 1xI²C, SWD, BOOT0, RESET.
- SPI-connected microSD memory card for SD, SDHC and SDXC cards with full integration of Fatfs file system.
- Molex 502570-0893 microSD push-push connector with card detection.
- STM32F091CBU6 MCU. **Available colors:**
- 8MHz external oscillator.

Commands *use with any serial terminal software*

`command parameter1 parameter2 …`

addlog *name type logRate delimiterFmt indexFmt indexLabel*

Create a new log with log *name* (without extension), *type* (`rate`, `event`), log rate *logRate* (`Hz`), delimiter format delimiterFmt (`space`, `tab`, `comma`), index column (leftmost) format *indexFmt* (`none`, `sample`, `time`) and index column label *indexLabel*.

logvar *logName varType varSrc label*

Add a variable to an existing log with *logName*. Variable type can be *varType* (`port digital`, `port data`, `port button`, `memory uint8`, `memory int8`, `memory uint16`, `memory int16`, `memory uint32`, `memory int32`, `memory float`). Variable source *varSrc* is (`P1 …Px`) for ports, (`B1 …Bx`) for buttons, memory location (Flash or RAM). *label* is variable column label.

deletelog *logName options*

Delete the log with *logName*. Delete *options* can be: `keepdisk` to delete from memory and keep on uSD card and `all` to delete everywhere.

Commands *continued*

start *logName*
stop *logName*
pause logName
resume logName

Start, stop, pause or resume this log.

Examples

```
addlog mylog rate 100 space time rtc_time

logvar mylog port button p1 switch1

logvar mylog memory float 0x20000100 myfloat
```

Messages *for inter-array communication*

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

APIs *getting your hands dirty!*

`output API_function(inputs)`

Module_Status **CreateLog**(const char* logName, logType_t type, float rate, delimiterFormat_t delimiterFormat, indexColumnFormat_t indexColumnFormat, const char* indexColumnLabel)
Create a new data log.

Module_Status **LogVar**(const char* logName, logVarType_t type, uint32_t source, const char* ColumnLabel)
Save data from a source to an existing data log.

Module_Status **StartLog**(const char* logName)

Module_Status **StopLog**(const char* logName)

Module_Status **PauseLog**(const char* logName)

Module_Status **ResumeLog**(const char* logName)

Module_Status **DeleteLog**(const char* logName, options_t options)

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Examples