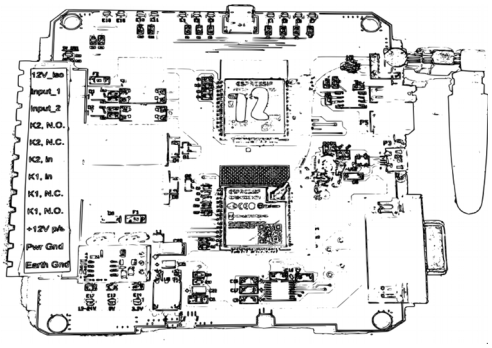
QCAN2

Command Line

Manual



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Terminal Interface

There is a terminal interface available on the QCAN2's USB port. Connecting to it will permit one to diagnose the QCAN2, see state machine states, and a lot of other useful information. Typing 'help' into the terminal will deliver a summary of commands available. Below is a sample output of the QCAN2 terminal:

```
06:16.3 34 QCAN_STATUS_IDLE -> QCAN_STATUS_EVAL zone=1 (45, 00)
06:17.1 34 QCAN_STATUS_EVAL -> QCAN_STATUS_WAIT zone=1 (45, ff)
06:17.1 SET SPEED 0
07:58.4 34 QCAN_STATUS_WAIT -> QCAN_STATUS_BULLY zone=1 (45, 00)
07:58.5 SET SPEED 2
08:09.4 34 QCAN_STATUS_BULLY -> QCAN_STATUS_RELEASE zone=1 (00, 00)
08:10.2 34 QCAN_STATUS_RELEASE -> QCAN_STATUS_IDLE zone=0 (00, 00)
```

The connection parameters to the terminal: 8N1 115200 Baud

Commands Available

There are commands to control, diagnose and troubleshoot the QCAN2. Below, is a list of commands, enclosed in quotes (nov/1919):

"ls" "stat" "macs" "leak" "can" "xcan" "xrfmon" "check" "dump" "bdump" "set" "get" "stop" "start" "?" "help" "clear" "echo" "noop" "logdel" "log" "cpu" "nvs" "mem" "m" "reboot" "aclose" "list" "ant" "req" "rel" "auto" "id" "name" "zone" "azone" "mode" "verbose" "force" "bench" "benset" "pok" "rfmon" "hello" "serial" "version" "ver" "stale" "switch"

Command Descriptions

Following, the list of commands and their short description. Commands marked 'for testing' are considered internal; commands marked 'obsolete' where created during development, and they are no longer needed.

zone [none_num]:	get or set this QCAN's own zone (for door function)
name [new_agv_name]	get or set this QCAN's AGV name. (Friendly Name)
verbose [num]	set verbosity 0-10 0 = silent 10 = noisy; default = 1"
stale	Show inactive (stale/dead) QCAN2 table entries
id	print QCAN2 identity; mac firmware version

version	Show QCAN2 version number
stat	show QCAN2 internal tables and statistics
ls	list (dump) current RF table
dump	list (dump) current RF table (alias)
can	print incoming CAN data (for testing)
xcan	print outgoing CAN data (for testing)
rfmon	print incoming RF data
xrfmon	print outgoing RF data
serial	Show serial traffic
stop	Issue STOP command to AGV
start	issue START command to AGV
help	Show help on command
clear	clear/rebuild RF table and statuses
echo	echo string back to terminal (alive?)
noop	NOOP does nothing (connected?)
leak	Continually monitor free memory amount
nvs	Show QCAN2 NVS memory
mem	Show QCAN2 memory consumption (leak detection)
cpu	show QCAN2 cpu consumption (load trace)
azone [none_num]	get or set default zone for auto (test) functions (default 100)
log	show QCAN2 logs
logdel	delete QCAN2 logs
ant: [zone]	instruct QCAN2 with anticipate intersection
req: [zone]	instruct QCAN2 with request intersection
rel: [zone]	instruct QCAN2 with release intersection

mode [none_num]:	get or set mode (0=AGV 1=door 3=?) (obsolete)
aclose	toggle both auto close / auto release
switch	Show switch states
set	set various parameters (noop now)
get	get various parameters (noop now)
list	listing items that can be get / set (noop)
force	force toggle bully state with no consideration (for testing)
benset	pok zone mac - Set remote bench status for QCAN2 (for testing) (obsolete)
bdump	dump current BENCH table (testing) (obsolete)
macs	List known macs
check	sanity check for internal use
hello	provoke new status list

Connecting

Connecting from a PC. Putty is a universally available client. We connected the QCAN2 from W10 an Ubuntu with the same results.

On the screenshot to the left, putty configuration parameters are featured. Note the flow control is set to None.