HANNES SOFTWARE / BUS SCOPE SAMPLE EVIDENCE REPORT

USB bulk endpoint stalls during firmware transfer

A sample report for a device that enumerates but stalls or times out during a bulk endpoint transaction.

SCENARIO

Firmware transfer failure

LIKELY CAUSE

Endpoint firmware state, transfer size handling, timeout behavior, or device-side flow control is failing after setup.

FAILURE BOUNDARY

Enumeration succeeded, but the failure occurs after host traffic moves to the bulk endpoint used by the firmware transfer.

RAW EVIDENCE EXCERPT

```
Device configured; bulk OUT starts; transfer status changes to stall/timeout; no matching successful completion for the requested payload window.
```

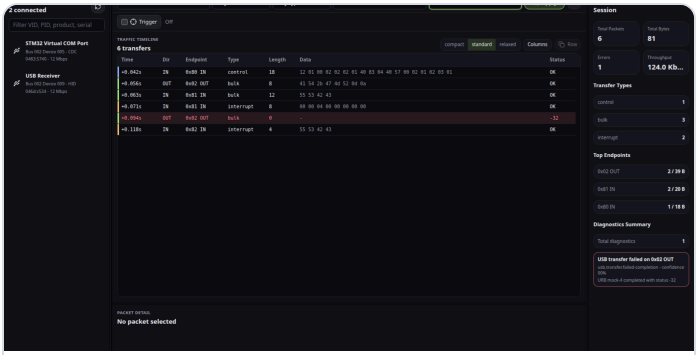
Evidence table

LAYER	FINDING	IMPLICATION
Enumeration	The device configured successfully before bulk transfer traffic began.	The failure is not basic USB visibility or driver installation.
Bulk endpoint	The failing status appears on the endpoint used for the transfer payload.	Firmware transfer handling, endpoint buffering, or host timeout settings should be reviewed.
Payload window	The captured payload context narrows the failure to a repeatable transaction window.	The case can be reproduced and compared across firmware builds.

Recommended fix

1. Retest with the same payload size on a known-good firmware build.
2. Check endpoint max packet size, buffering, NAK/stall handling, and host timeout policy.
3. Save the .bscope session and attach the report to the firmware regression ticket.

Evidence screenshots



Transfer evidence

Focused filters keep endpoint direction and transfer type visible while isolating the failing bulk path.

This sample is static marketing evidence. Real reports are generated locally from the case data inspected in Bus Scope.