KEYBOARD / generation 1 — User manual

Library: `src/lib2/keyboard/1/`
Edition: 2026-11-18, source/document review (documentation only)
Qualification: Older source-derived keyboard generation; independent native and PB-2000C/AI-1000 runtime qualification remains open.

What this member does

Historical K540 key-matrix decoding and a card-local keyboard event/session adapter with CAPS handling.

Public interfaces

Entry point or group	Inputs, outputs and behavior
`K540_INIT / K540_RESET`	Initialize or clear borrowed KEYMD mode RAM; use reset on exit.
`K540_GET`	Blocking key press/release; `$17` event class, `$0` key, `$13` CAPS mode.
`K540_MODE`	Read current KEYMD mode into `$13`.
`K540_RAW`	Low-level key matrix service; exact event semantics require source review.
`KBD_INIT / KBD_EVENT / KBD_RESET / KBD_RELEASE`	Thin session-adapter labels to K540 functions.

How to integrate

Include `keyv540.inc` once, implementation `keyv540.s` and optionally `keyboard.s`; initialize card-local session, call `KBD_EVENT/K540_GET`, act on event class, reset before returning to any host keyboard handler.

Composition sketch (not an independently assembled client):

```
#INCLUDE (lib2/keyboard/1/keyv540.inc)
; Supply the dependencies, RAM, bank context and symbols described above.
        CAL     K540_INIT
```

Environment, dependencies and memory

Borrowed KEYMD RAM1 `09E4h`; cannot overlap host CRTKY/KEYMD ownership. Valid stack, card ROM access and power/BRK policy from caller.

Limits and evidence

Older generation does not establish keyboard/3 one-shot SHIFT behavior. Do not assume a hardware-qualified dual-machine keyboard service.

This documentation does not introduce a new build or runtime PASS. Source equivalence, native assembler parity, emulator execution and physical-machine evidence remain distinct.

Actual source and further reference

- This exact member folder in Google Drive
- Source modules: `keyv540.inc`, `keyv540.s`, `keyboard.s`.
- Further contracts/source notes: keyv540.inc. These may include dated donor paths or older acceptance statements.
- For a new consumer, pin exact source files and hashes, verify full include closure, inspect register/bank/resource conflicts and test the resulting application on each claimed target.

Praeteritum ad futurum servamus.