

## # BS02 Zero Page Reference

Monitor ZP range: `\$30-\$8F`

User ZP range: `\$90-\$FF`

Source include model: prefer `INCLUDE EQUATES.INC` for monitor builds; `EQUATES.INC` automatically includes `MACROS.INC`.

Label	Size	Address	Use	Ref
CORE_WORKSPACE	72 bytes	`\$30-\$77`	Monitor workspace (pointers, parser, debug scratch)	1
GAME_ASK_PENDING	1 byte	`\$78`	Sticky game prompt latch (`01` default on POR/invalid-cookie only; warm reset preserves)	3
BRK_FLAG	1 byte	`\$79`	Debug/BRK context-valid flag	5
TERM_COLS	1 byte	`\$7A`	Terminal width preference (`14/28/50/84` = `20/40/80/132`)	7
TERM_WIDTH_TIMEOUT	1 byte	`\$7B`	Legacy width-prompt timeout byte (`00=forever`, `01-FF=seconds`; default `08`)	8
RESERVED_GAP_A	2 bytes	`\$7C-\$7D`	Reserved gap before terminal cursor scratch	
TERM_CUR_COL	1 byte	`\$7E`	Current output column tracker (terminal wrap state)	
TERM_WAIT_SECS	1 byte	`\$7F`	Width prompt countdown scratch	
RST_HOOK	3 bytes	`\$80-\$82`	Reset trampoline target	9
NMI_HOOK	3 bytes	`\$83-\$85`	NMI trampoline target	11
IRQ_HOOK	3 bytes	`\$86-\$88`	IRQ trampoline target	13
BRK_HOOK	3 bytes	`\$89-\$8B`	BRK sub-dispatch trampoline target	10
HW_HOOK	3 bytes	`\$8C-\$8E`	Hardware IRQ sub-dispatch trampoline target	12
RESERVED_GAP_B	1 byte	`\$8F`	Reserved gap after trampolines	
USER_ZP	112 bytes	`\$90-\$FF`	User-owned ZP range	15

## ## Command Map (BS02)

Cmd	Symbol(s)	Purpose	refs
`H`	`H P`	Fixed-address help lines	3, 7, 8, 9, 10, 11, 12, 13, 15
`V`		Vector chain display	9, 10, 11, 12, 13
`!M`		Manual byte poke for pinned bytes	3, 7, 8
`Q`		Halt/resume flow tied to NMI/Reset	9, 11
`R`, `N`, `X`		Debug/step/execute flow using context + vectors	5, 9, 10, 11, 12, 13

## ## Reference Legend

1. Core monitor ZP workspace block (`\$30-\$77`)
3. Game prompt latch byte (`\$78`)
5. Debug/BRK context flag (`\$79`)
7. Terminal-width pin byte (`\$7A`)
8. Terminal-width prompt timeout byte (`\$7B`)
9. Reset trampoline (`\$80-\$82`)
10. BRK sub-dispatch trampoline (`\$89-\$8B`)
11. NMI trampoline (`\$83-\$85`)
12. Hardware IRQ sub-dispatch trampoline (`\$8C-\$8E`)
13. IRQ trampoline (`\$86-\$88`)
15. User-reserved ZP (`\$90-\$FF`)