

**HANDY RELEASE 0.8.3a**  
**30 May 1989**

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This document describes the V 0.8.3a bug-fix release of the Handy development environment.

6502:examples/cartdefs.i with the ROMDIR\_FILE1\_Mumble definitions I promised.

Oops, the system now sets NO\_COLLIDE in SPRSYS before displaying the file 0 sprites.

In 6502:examples the testcart.src and testcart.hsf files now demonstrate the file 0 / file 1 technique.

New IODAT\_RAM shadow mask. The IODAT hardware register isn't really read/write, so you should use the IODAT\_RAM shadow whenever writing to the register. IODAT\_RAM is declared in sysdata.src. Also, in support of the new IODAT\_RAM, a new cart.mac is released. Likewise, new handy and chip monitors are released. And, yes, HANDY:cartgo.bin and .sym coming at you.

New manual are released, which describe the newly discovered facts about IODAT and and about the NEXT SCB register.