OM-64R - 64 kB ROM Card
For CASIO PB-2000C & CASIO AI-1000

Technical Brochure



OM-64R card, programmed with a OM-52C image, next to an Original CASIO OM-52C card.

Overview

A ROM Memory Expansion Card designed specifically for the CASIO PB-2000C and AI-1000 Pocket Computers (ポケコン). Compatible with vintage OM cards, such as the CASIO OM-52C.

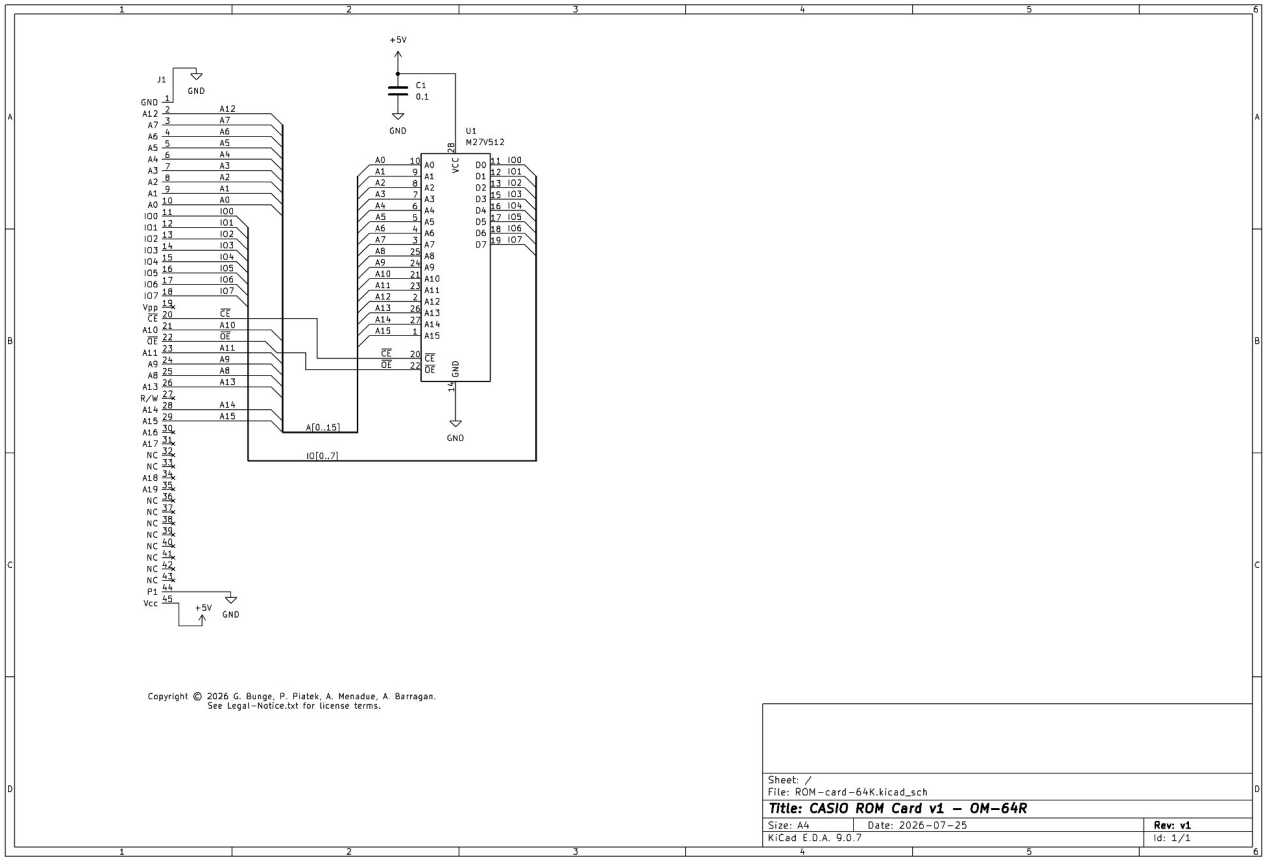
Key Features

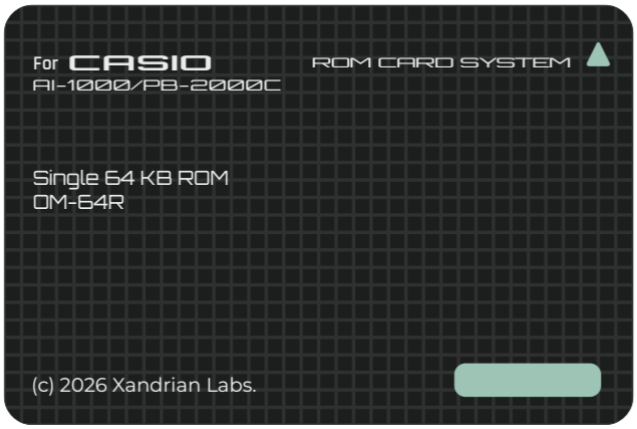
- PB-2000C / AI-1000 Compatibility: Connects using an OM compatible 45-pin, 1mm connector.
- One ROM image per card: 64 kB ROM image, identical to the original OM CASIO ROM Language Cards.
- Archive Compatible: Fully compatible with original OM ROM dumps sourced from online archives (such as the Internet Archive) and open-source ROM images.
- The **OM-64R** denomination pays homage to the original OM series while highlighting its **64 KB ROM**.

Technical Specifications

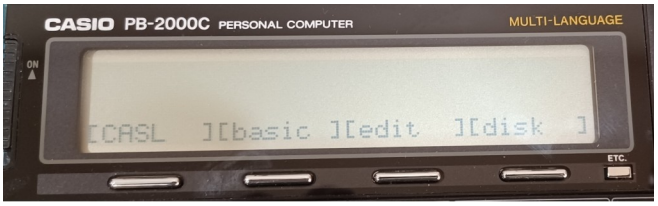
Target Hardware	CASIO PB-2000C, CASIO AI-1000
Connector Standard	45-Pin 1.0mm pitch. JAE JC20-C45S-1-A1 compatible
Memory IC	M27V512-120N1 – One time use EPROM
Storage Size	64 kB
Programmable	OTP. Uses a programming adapter and external programmer card for a one time only programming cycle.
Case	3D-printed. Polarized geometry. SLA(Resin). JLC Black Resin. 5.39×4.29×0.21cm. Attached using double-sided 3M adhesive tape.
Supply Voltage (Vcc)	3.3V (Rated) / 5.0V (Actual)
Active Current (Icc)	30 mA
Standby Current (Isb)	100 uA
Estimated Active Power	150 mW

Schematic


+5V
C1
0.1
GND
J1
U1
M27V512
A[0..15]
IO[0..7]
Copyright © 2026 G. Bunge, P. Piatek, A. Menadue, A. Barragan.
See Legal-Notice.txt for license terms.
Sheet: /
File: ROM-card-64K.kicad_sch
Title: CASIO ROM Card v1 – OM-64R
Size: A4
Date: 2026-07-25
Rev: v1
KiCad E.D.A. 9.0.7
Id: 1/1

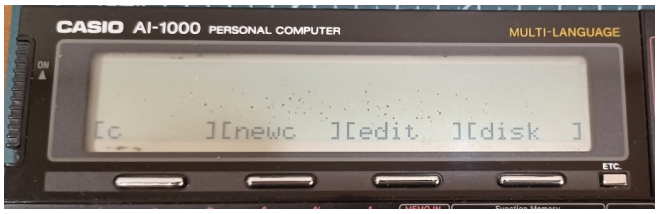

For CASIO
AI-1000/PB-2000C
ROM CARD SYSTEM
Single 64 KB ROM
OM-64R
(c) 2026 Xandrian Labs.

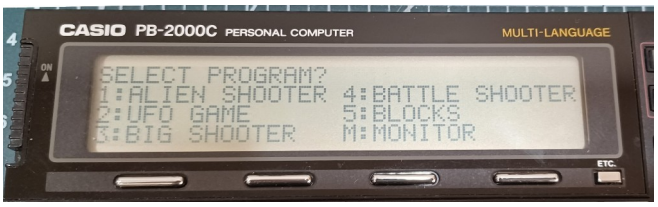
Screenshots











Attributions & Licensing

This project was produced by Xandrian Labs, made possible by the invaluable contributions and research of Piotr, Andrew, Garrett, and Alex. 付喪神.

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