

# CodeWarrior™ Development Studio for NINTENDO GAMECUBE™ TDEV Edition

Looking for a cheaper, more stable, networked solution for NINTENDO GAMECUBE™ development? CodeWarrior completes the GAMECUBE development solution with distribution and full support for Nintendo's new TDEV development kit.

The TDEV hardware unit is similar to an NR-Reader with 48MB of RAM (same RAM as GDEV and DDH units). Metrowerks provides

the capability of networking through the TDEV's broadband adapter assembly. Developers can share TDEV units, work remotely, and have greater confidence during development while using fast and stable hardware. CodeWarrior for NINTENDO GAMECUBE™ TDEV Edition allows for full support for all existing Nintendo development hardware.

### Benefits

- > Network capability allows for easy sharing of TDEV unit among multiple hosts and the ability to work remotely.
- > Host I/O provides general file access on the Host PC; Serial I/O provides OS report capability on the Host PC, making development easier.
- > Fast connection/download speeds enabling quicker development
- > Significantly cheaper than the current Nintendo Development Hardware
- > Ability to utilize all existing Nintendo® development hardware with CodeWarrior for NINTENDO GAMECUBE™ TDEV Edition
- > Familiar development environment provides a seamless transition to TDEV development
- > Ethernet connection via the Nintendo Broadband Adapter (BBA) to the Nintendo TDEV, providing a fast data transfer.

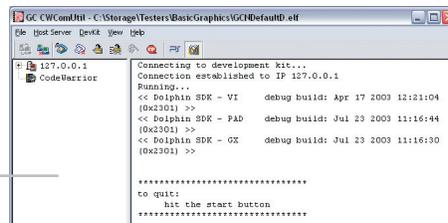
### TDEV Hardware Benefits

#### Simplistic Design

- > Contains 48MB of memory, providing additional space for debugging and testing
- > Fewer hardware-based problems to troubleshoot
- > More capable than NR-Reader-based development kit
- > Uses NR optical disks for accurate DVD performance

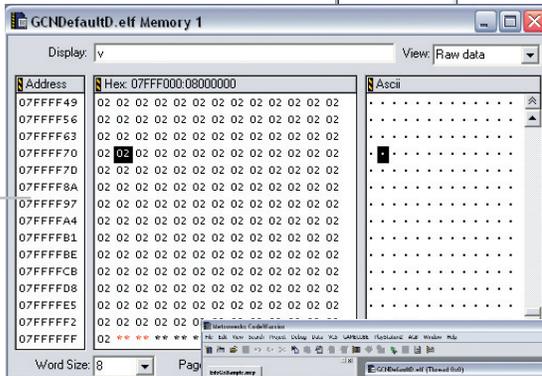
### CodeWarrior Communication Utility (CWCComUtil)

Allows remote download. Host I/O and Serial I/O.



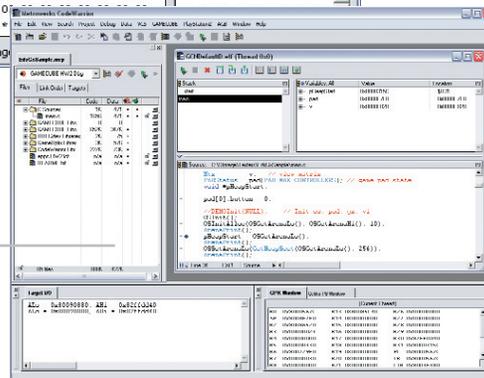
### Memory Window

Read/write to contents of the main memory or ARAM Memory Viewer.



### Integrated Development Environment (IDE)

Same familiar Environment can be used with CodeWarrior for Nintendo® TDEV





# Warrior Development Tools for NINTENDO GAMECUBE TDEV Edition

## Complete Development System

- > Run and debug code
- > The Nintendo broadband adapter plugs in the serial port on the base of the TDEV
- > Easy to set up (no card installation necessary)
- > Nintendo supports optical disc emulation, using Nintendo's standard DVD functions

## Cost Effective

- > TDEV is a cost-effective solution as compared with other Nintendo® hardware units
- > TDEV can be shared among many developers
- > Capabilities of a DDH, NR-Reader, and NPDP-GDEV

## CodeWarrior IDE

- > Customizable toolbars and key bindings
- > Improved Find dialog/engine search
- > User preferences/window layout can be saved
- > Improved built-in context menus in the Editor
- > Shielded folders/find-and-compare operation on project folders during builds
- > IDESpy: displays version information of all components — invaluable when seeking technical support
- > Code completion for C and C++
- > Event Points – Conditional breakpoints that perform specific tasks without program halting. Supported points include pause, script, skip, sound and log
- > Docking windows
- > Workspaces

## Compilers, Linkers, Assemblers

- > Vectorized paired singles supported through C Intrinsics
- > Relocatable Module Support and interface upgrades
- > Supports function-level, inline and stand-alone assembly

- > Single precision FPU libraries optimized for PowerPC®
- > Linker aggressively dead strips unused library functions
- > Linker command file supports user-defined sections
- > Optimization Guide in product documentation
- > Fast compile times by utilizing concurrent compiles on multi-processor systems
- > Fast Trig Routines
- > Command line tool adapters
- > View symbols and macro definitions

## Debugger

- > Full download and fast run control for TDEV hardware
- > Full Debugging support available with use of CodeWarrior for NINTENDO GAMECUBE™
- > Use of BBA to Debug the TDEV
- > Graphical source and assembly-level debugger provides quick access to watchpoints
- > Registers (GPR,FPR, PS,SPR,GQR)
- > Read/write main memory
- > Read/write to contents of Auxiliary RAM (ARAM) Memory Viewer into the IDE debugger. View audio samples and other program data using the ARAM viewer
- > Fast download and stepping Speeds
- > CodeWarrior displays TTY output

## CWComUtil

- > Full TDEV support in our CodeWarrior Communication Utility (CWComUtil) for NINTENDO GAMECUBE
- > Remote download of code and data through a connected Win32 server. Client/server architecture
- > Serial and host I/O in debugger
- > Read/Write to a specific memory block on target through COM

## System requirements

CodeWarrior for NINTENDO GAMECUBE TDEV edition is compatible with: CodeWarrior for NINTENDO GAMECUBE, CodeWarrior Analysis Tools for NINTENDO GAMECUBE

### Host

- > Windows® 2000/XP
- > 1.5 GHz or faster Intel® Pentium® IV processor or AMD equivalent
- > 512 MB RAM
- > 400 MB plus space for user projects and source code
- > CD-ROM drive
- > NINTENDO TDEV Hardware

Target (included with CodeWarrior Game Development Tools TDEV Edition)

- > TDEV hardware unit
- > Broadband Adapter Assembly
- > 251 Memory Card
- > NR optical boot disk

### Other Needs

- > GAMECUBE Operating system CD, obtained directly from Nintendo

## Freescale Developer Technology Game Organization Services and Technical Support

- > Freescale online support is available 24 hours a day, 7 days a week and provides the ability to:
  - download product updates
  - check the status of support requests
  - view your account information
  - access online knowledge base for frequently asked questions
- > Technical support is available via telephone and email during regular business hours

**Learn More:** For more information about Freescale products, please visit [www.freescale.com/games](http://www.freescale.com/games).