



**RAISONANCE**  
a KEOLABS brand

**Raisonance brand application  
development tools for MCUs**

## **EvoPrimer/Open4 STM32F429**

Embedding a Microcontroller Graphics Revolution

# KEOLABS' Brand for MCU Development Tools

**KEOLABS**

your challenges, our solutions

*Validation solutions for the microelectronics industry*

- Smart Card Certification
  - Testing platforms
  - Standard-specific test & certification solutions
  - ISO17025 accredited Certification Center
- MCU application development tools...

## Tools for Microcontrollers

- Raisonance brand tools
  - Since 1988
- Complete hardware / software tool offer
- Supporting a range of ST MCUs
  - STM32
  - STM8
  - ST7
  - SPC56



# EvoPrimer / Open4 Platforms

## Explore, Create & Maintain STM32 Applications

- Explore STM32 capabilities & features
  - Interchangeable STM32 target boards
    - **NEW STM32F429**, STM32407IG, STM32L152, STM32F103VG, STM32F107VC, STM8L
    - +100 free sample applications (sources)
    - Hardware extensions for MEMS & RF
- Fine-tune applications
  - Complete software tool set (GCC, Ride7)
  - Integrated RLink (SWD, + SWV trace)
  - Program & debug external application boards
- Program, maintain & support in the lab or field \*
  - **NEW** Standalone programming of STM32 devices
  - **NEW** Standalone monitoring of applications during execution



\* Features available with purchase of upgrade (firmware/hardware) to EvoPrimer-LAB or Open4-LAB.

# EvoPrimer / Open4 Graphics Revolution

## Complete Solution for a Graphics Revolution

- STM32F429 with...
  - ARM Cortex-M4 core
  - Chrom-ART Accelerator™ (DMA2D)
  - Integrated SDRAM controller
- EvoPrimer platform with...
  - 240 x 320 px Color Touchscreen
  - Additional external SDRAM (target board)
  - CircleOS abstraction layer for DMA2D features
  - Sample code for GUI, Games



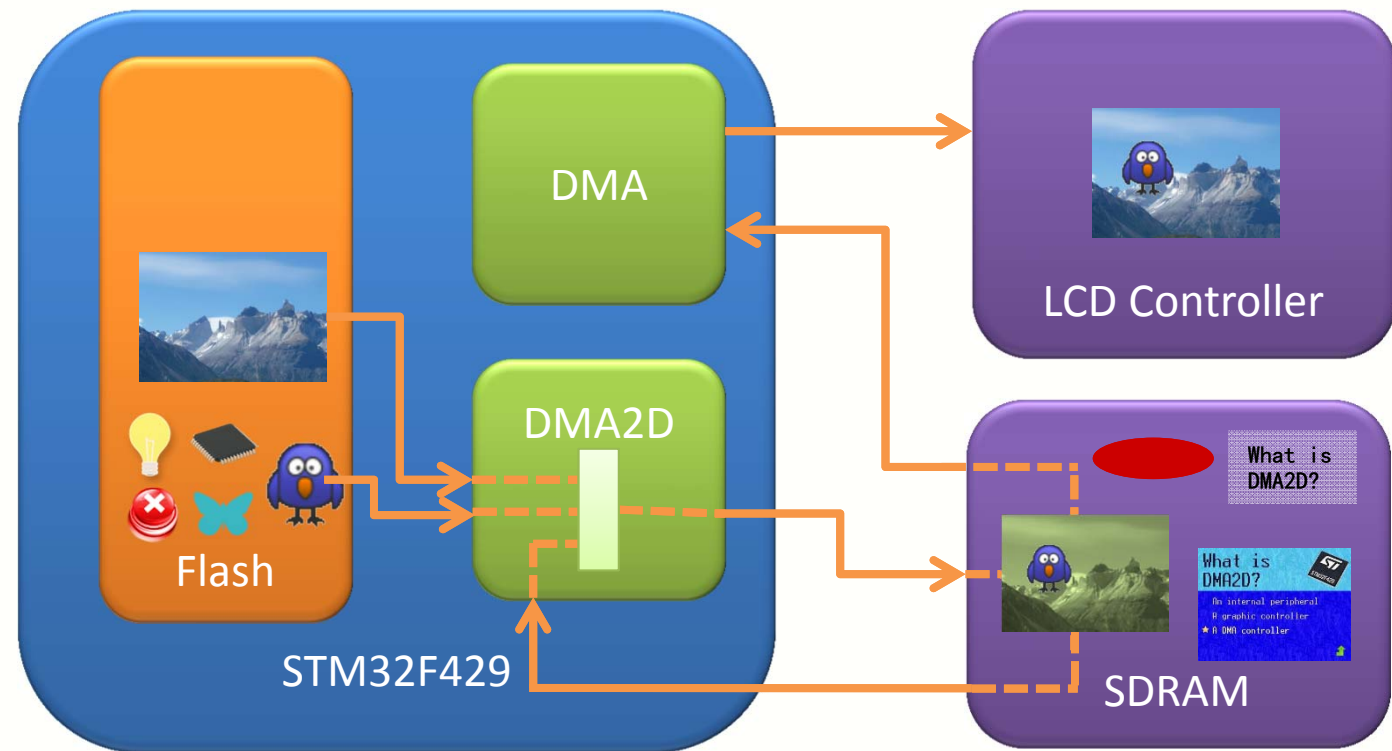
## Animate & Enhance Your Graphical Interfaces

- with minimum cost, code and impact on processor performance
- add object animation, movement, transparency, layering, and more...



# EvoPrimer / Open4 Graphics Revolution

## Chrom-ART on EvoPrimer/Open4 STM32F429

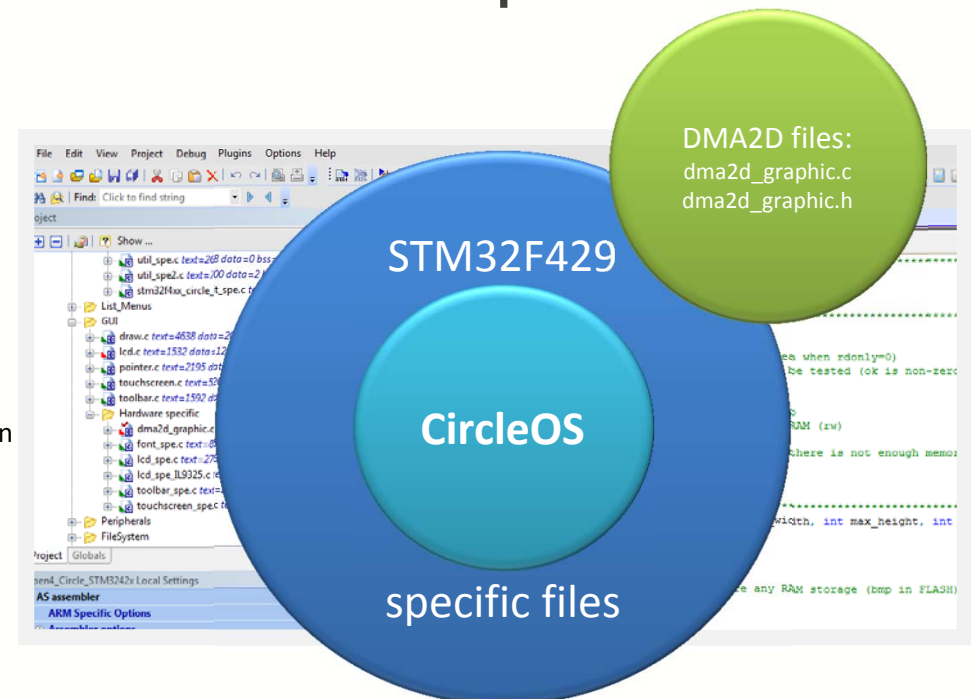


# EvoPrimer / Open4 Graphics Revolution

## Chrom-ART Accelerator™ on EvoPrimer/Open4

### ■ CircleOS Integration

- DMA2D Abstraction Layer
  - API to call features
  - DMA2D files easily split from CircleOS
- CircleOS
  - Peripheral abstraction for sample app. portability
  - API to ease implementation
  - Some minor evolutions...



# EvoPrimer / Open4 Development Features

## Software development tools\*

- GCC C/C++ compiler
- Ride7 development environment
- CircleOS API

## Hardware programming / debugging features

- SWD device interface (USB connection to PC)
- SWV for configurable execution trace

## stm32circle.com development support

- User forums for peer & Raisonance engineering support
- Wide range of sample applications (C sources)
  - Two STM32F429/DMA2D sample apps
  - +100 STM32 compatible sample apps
- +40 000 registered users



\* Unlimited compiling, programming. Debug up to 64 KB application code is device Flash > 64 KB. Debug up to ½ Flash size if device Flash is 64 KB or less. Upgradable to unlimited license for only 599 Euros.

# EvoPrimer Pricing

## EvoPrimer STM32F429

Products	Description	Notes	Price
EvoPrimer STM32F429 (STM3242IPRIMER)	Software / Hardware kit for STM32429 application development with integrated Chrom-ART™ graphics accelerator (DMA2D), LCD driver, SDRAM driver. Includes EvoPrimer base, STM32F429 target board. Complete software toolchain: Ride7, GCC C/C++ compiler for ARM.	"Lite" software license, unlimited compiling, programming, debug code size limited *	\$99 USD**
STM32F429 Target Board (STM3242IPRIM-D)	EvoPrimer target board for STM32429 application development with integrated Chrom-ART™ graphics accelerator (DMA2D), LCD driver, SDRAM driver. Complete software toolchain: Ride7, GCC C/C++ compiler for ARM.	"Lite" software license, unlimited compiling, programming, debug code size limited *	\$39 USD**

\* "Lite" software license: Unlimited programming. Debug up to 64 KB application code is device Flash > 64 KB. Debug up to ½ Flash size if device Flash is 64 KB or less.

\*\* Recommended pricing for STMicroelectronics distribution and direct sales.



**For More Information...**

## **Contact Raisonance tool sales reps...**

- [contact@raisonance.com](mailto:contact@raisonance.com)
- Regional distributors...
  - [www.raisonance.com/microcontroller\\_distributors.html](http://www.raisonance.com/microcontroller_distributors.html)

## **Visit Raisonance tool web sites...**

- For pricing and online purchase...
  - [www.raisonance.com](http://www.raisonance.com)
- For product support...
  - [support-raisonance.com](http://support-raisonance.com)