

Altia Tools for STM32

High Class GUIs for Low Power Microprocessors



Why choose STM32 for embedded GUIs?



- Cost and power requirements are two huge pain points for GUI developers
 - Target hardware must **be budget-friendly** or it will blow BOM costs
 - **Battery life** is a big concern – especially for medical devices
- STM32 is a great solution for GUI developers because of its:
 - Low price point
 - Low power consumption

The STM32 is a compelling combination of hardware capabilities for embedded GUI devices.

Why choose Altia for STM32 GUIs?

- Altia supports a broad range of STM32 F Series microprocessors, including:

- [F1 Series](#)
- [F4 Series](#)
- [F7 Series](#)

Mainstream



177 CoreMark
72 MHz
61 DMIPS
Cortex-M3

High Performance



608 CoreMark
180 MHz
225 DMIPS
Cortex-M4



1 082 CoreMark
216 MHz
462 DMIPS
Cortex-M7

Chrom-ART Accelerator™

- Altia's DeepScreen Code Generator takes full advantage of these micros to deliver top notch GUIs – even with limited RAM

Why choose Altia for STM32 GUIs?



- Altia provides direct, **native C code generation**
 - No large, mysterious black box engines
 - No slow, interpreted languages
 - Getting all source code simplifies certification

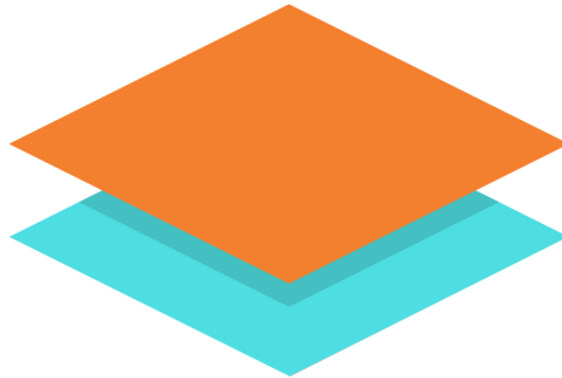
- Generates code **only for the assets needed**
 - Saves memory
 - Boosts performance
 - Less code to validate and test

Recent study finds
that **83% of all
embedded projects
use C/C++.**

- UBM Embedded Markets Study

Altia takes full advantage of features on STM32 hardware:

- Dual-layer Architecture*
- Chrom-ART Accelerator



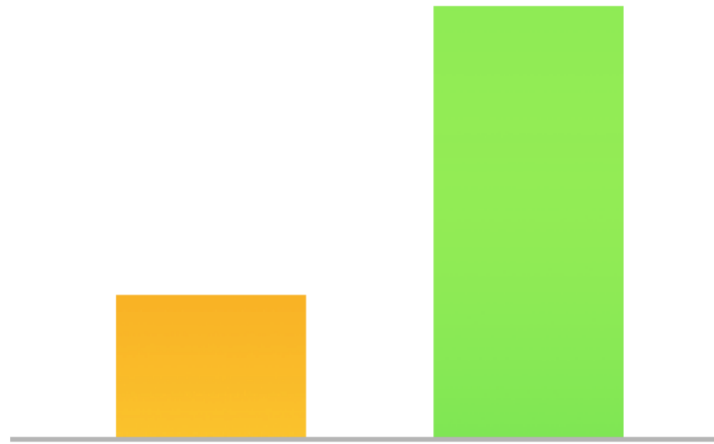
* Layer support feature running on STM32 F Series in early development at time of writing.

The Altia Design **Layer Manager** is the key to easy use of layers on STM32.

- The **Altia Layer Manager** offers unparalleled graphical use and control of the STM32 F4 and F7 Series available layers
 - **Dual layer** support for both families
 - Speedy, layer-enabled **hardware alpha blending**
 - **Offload CPU** work – further boosting performance



Altia uses on-chip
Chrom-ART Accelerator
for best performance.



Using Chrom-ART, Altia **improves frame rates by 90%!**

Want to experience Altia in action on STM32?

Complete our Embedded GUI Survey for your chance to win an
STM32 Discovery Board!

<https://www.surveymonkey.com/r/AltiaSTM32>