

Altia Tools for Vybrid

Maximizing Hardware Potential

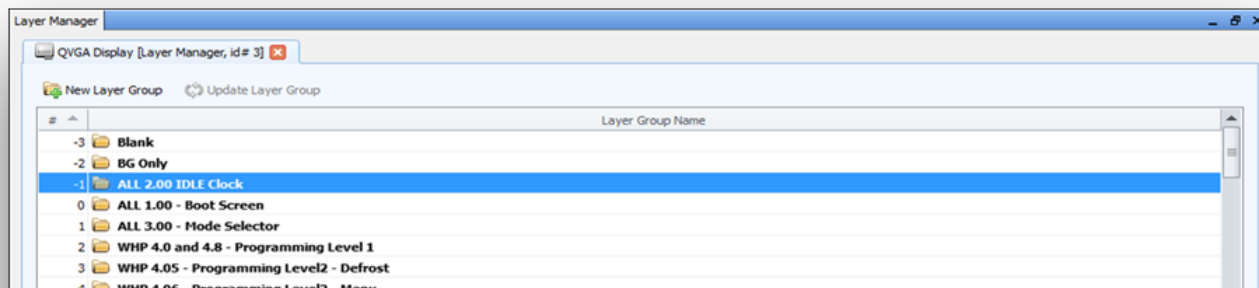


- **Very** low power consumption
- Less memory AND better graphics via:
 - Use of assets **directly** from Flash
 - Hardware **layers**

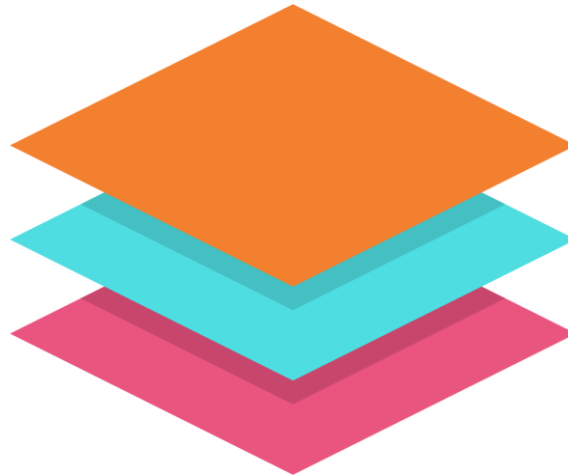


Altia takes full advantage of Vybrid's
layered hardware architecture
in the 2D ACE display unit.

The Altia Design **Layer Manager** is key to providing this level of usage and control



- Create virtually unlimited layers for the design
 - Vybrid has a limit of 64
 - Altia re-maps virtual layers to hardware on-the-fly
- Get **free animations** (no CPU)
 - Moving objects
 - Revealing groups of objects



- Define layer properties
 - Names
 - Visibility
 - X/Y Location
 - **Color Format**

- Easily set different color formats on each layer
- Drastically reduce **ROM requirements**
- Improve image appearance
 - Indirect color allows 32-bit colors using only 8 bits-per-pixel
- Re-use palettes across layers to save even more memory



Example:

- Double buffered frame buffer
- 800 x 480
- 16 bits per pixel (bpp)
- Very simple design with **background**, 4 buttons and 4 tiles



Vybrid

- Frame buffer: **0 MB**

Traditional Frame Buffer

- Frame buffer: 1.5 MB

Altia Vybrid **RAM Savings:**

1.5 MB

Vybrid

- Background PAL 8: **375 kB**
- 4 button images PAL 8: **122 kB**
- 4 complex tiles Alpha PAL16: **309 kB**

TOTAL: 806 kB

Traditional Frame Buffer

- Background RGB565: 750 kB
- 4 button images RGB565: 245 kB
- 4 complex tiles RGB565: 309 kB

TOTAL: 1304 kB

50% more color –
HALF the space!

Altia Vybrid ROM Savings:

0.5 MB

On just NINE Images!

Free Vybrid Binary

Want to see Altia in action on your Vybrid board?

Get in touch at info@altia.com.