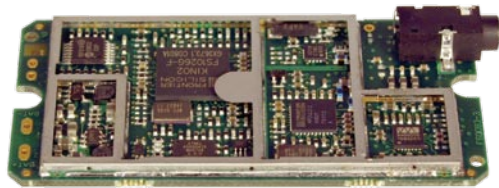
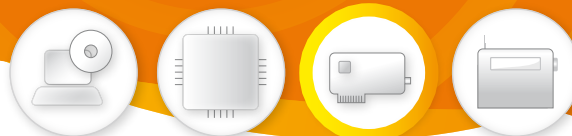


Vega FS4051

Module for personal handheld DAB/FM radio



*Vega with screening can removed,
actual size, 63 x 32 x 9 mm*



Application

- Personal pocket radio

overview

Vega is a miniature, high-performance DAB/FM-RDS radio PCB module. It is designed for easy integration into an OEM case for sale as a portable audio player, and is the smallest stand-alone DAB radio available.

Vega's design is based on the acclaimed Madison DAB accessory for iPod, and uses the Kino 2 baseband processor, at the heart of most DAB radios on sale today. The software/UI is fully configurable.

The single PCB assembly requires only the addition of a keymat, case, battery and headphones to complete a product. The headphones also act as an aerial.

The device is intended for use with two AAA cells, which can give over 10 hours of DAB reception, or over 15 hours for FM.

Vega is provided complete with a full engineering design pack.

Features

- DAB/FM-RDS receiver
- Designed to be compliant with all relevant standards including EN 50248-2001, RoHS, IEC 60068-2-6, EN300-401, EN 55013: 2001, EN 55020: 2007, EN 60950, EN 50332¹
- Integral 3.5 mm stereo headphone/antenna socket
- Single-board solution
- Display: 22 x 8 mm, 96 by 16+1 px FSTN LCD with 5 levels of contrast showing station name for both FM and DAB, with icons for:
 - volume/mute,
 - DAB/FM mode
 - favourites (presets)
 - signal strength
 - battery status (four levels)
- Backlight with three brightness settings and timer
- Keypad with the following functions
 - tune/scan
 - next/previous station
 - power
 - volume up/down/mute
 - favourites
 - soft-lock keys
- EQ (off, megabass, vocal, rock, loudness - DAB mode only)
- 18-month from manufacture/12-month end-user guarantee

digital **Radio**



*Vega, front view, showing
integrated display and
keyboard contacts*



*Example
end-product*

¹ CE and other certification, if required, must be obtained for the final product by the OEM.



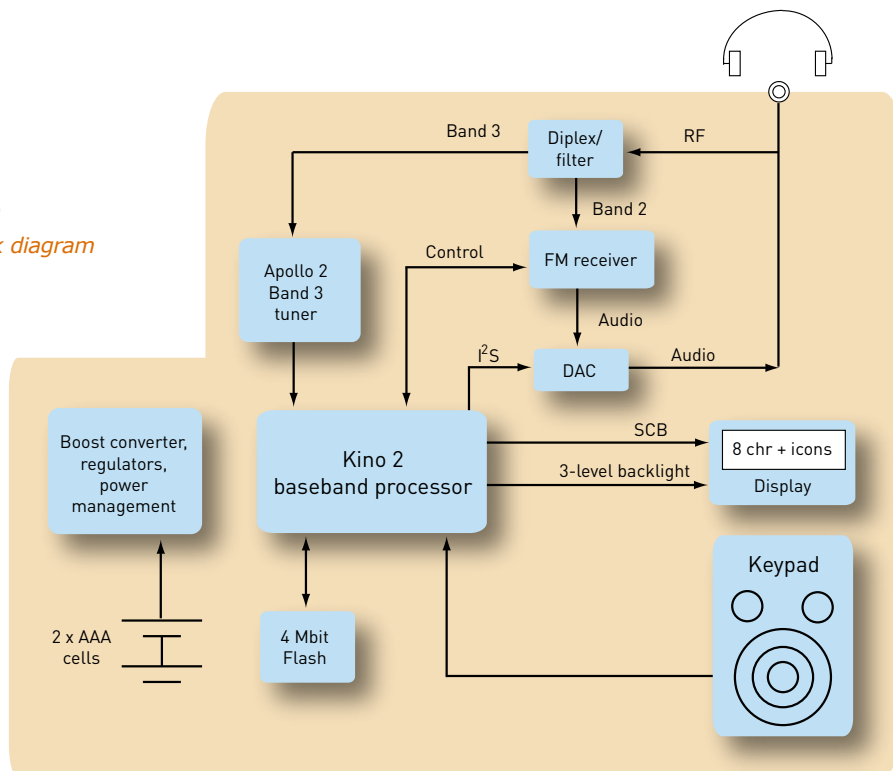
**FRONTIER
SILICON**

www.frontier-silicon.com

Vega FS4051

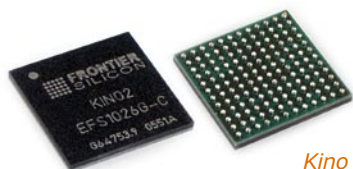
Module for personal handheld DAB/FM radio

Vega
block diagram



Kino 2 baseband processor

The Kino 2 FS1026 IC is an advanced programmable DAB baseband receiver, incorporating a number of mixed signal system components as well as advanced peripherals previously only available as discrete additional components, providing significant space, cost and power savings.



Kino 2

Specifications

DAB:	Sensitivity	-97 dBm (typical)
	Tuning range	174 - 240 MHz
FM:	Sensitivity	-106 dBm (typical)
	Tuning range	87.5 to 108 MHz
Operating temperature		0 - 50 °C

Frontier Silicon can also offer product industrial designs, developed in partnership with *therefore*, product design consultants.

www.frontier-silicon.com

Specifications are subject to change without notice.
© 2008 Frontier Silicon Limited

Printed on recycled paper

Frontier Silicon is a trademark or registered trademark of Frontier Silicon Ltd.

FRONTIER SILICON

Head Office: Gleneagles, The Belfry, Colonial Way,
Watford, Hertfordshire, WD24 4WH, UK
Phone: +44 1923 474 200 F: +44 1923 202 251
E-mail: info@frontier-silicon.com