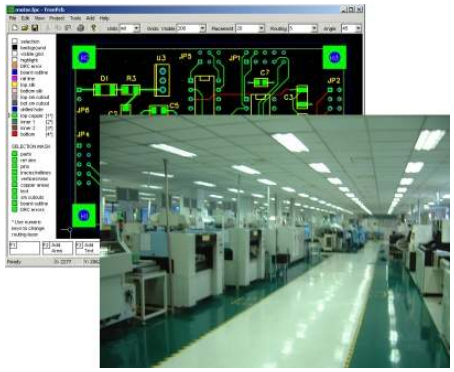
PIRA32 RDS Encoder Solution – Ready for your application

Dear FM broadcast equipment producer, we really appreciate your interest in our RDS encoder solution. We assume that you are familiar with its basic characteristics and purpose and you are probably thinking about its deployment to production. Now let us introduce its background in a few minutes.

Our support
and key parts

+



Your production capacity

=

Final products
sold under your brand

Benefits

- No admission charge [1]
- Short design stage
- Total control over the production
- No software development required
- Effective design saves PCB space and production time
- Full documentation available
- No quantity limits [2]
- Professional product at the end with excellent support in 3rd party applications

[1] You pay only for actually ordered parts.
[2] We support companies with a demand of tens pieces per year as well as hundreds or thousands.

RDS Encoder - Basic application circuit

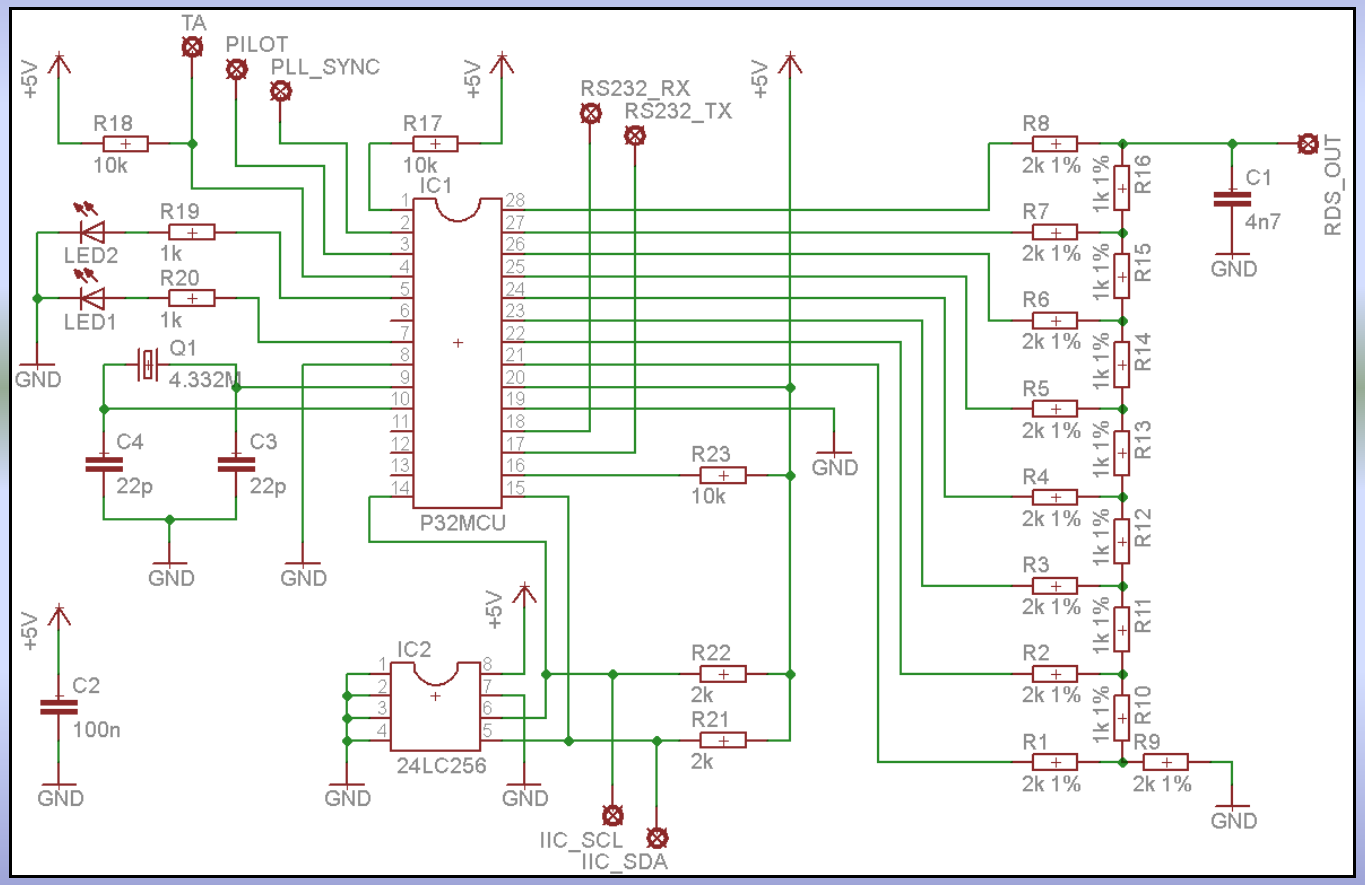


Figure 1 – Basic application circuit.

TA	Traffic announcement switch. Driving this pin low will activate the RDS TA flag. **(Optional)**	**PLL_SYNC**	Synchronization source selection: 0 – External pilot, 1 – Internal clock.
PILOT	Pilot input (19 kHz TTL) from stereo encoder or pilot recovery circuit. **(Optional)**	**IIC**	Expansion IIC bus. Actually these devices are supported: 24LC256 (EEPROM), PCF8563T (RTC), MCP4551 (digital potentiometer), MCP23008 + HD44780 based 16*2 LCD display. All devices are optional allowing custom configuration.
RS232	RS232 interface in TTL levels for connection to a PC or any data provider through a level converter, USB adapter or Ethernet adapter.	**RDS_OUT**	RDS output modulated at 57 kHz subcarrier. For direct FM broadcasting additional 57 kHz bandpass filter is recommended: -20 dB (15 kHz), 0 dB (57 kHz), -30 dB (361 kHz).

Single microcontroller concept

To make your work easier we have implemented all the features into a single 28-pin microcontroller called "PIRA32 Microcontroller". Do not look for any 4xxx logic, lots of crystal resonators, complicated power supply nor high order filters. Do it effectively!
While competitive solutions are often based on copying of ideas, our design has been already introduced in 2005, it's continuously improved and it's fully original. This can be documented on its unrivaled hardware simplicity, number of features and support in many 3rd party applications.

Main benefits of the single microcontroller concept:

- Simple PCB design
- Easy to meet EMC standards and rules
- Very low costs
- Easy and user friendly firmware update

Need more information?

Contact us via email, introduce your company in a few sentences and request additional documents, information, design tips and actual PIRA32 Microcontroller pricing.

Web: **http://pira.cz/rds/**
E-mail: **mail@pira.cz**

Related documents:

- PIRA32 RDS Encoder Technical Manual - http://pira.cz/rds/manual.pdf
- Magic RDS Help - http://pira.cz/rds/magicrds.zip