

RF Design Kit ATAK57xx Selection Guide

Atmel offers various kinds of RF Design Kits for different RF frequencies. These kits consist of a motherboard, a transmitter design board, a receiver design board, the RF design kit software and a number of other components.

This selection guide for the different ATAK57xx RF Design Kits makes it easy to find the order number for your specific requirements. To make the selection clear the procedure is illustrated in the flowchart on page 2.

Please proceed with the selection as follows:

1. Choose the desired RF frequency
2. Decide whether a SAW front-end filter on the receiver board is needed or not. Using a SAW front-end filter results in the following advantages:
 - Increased system selectivity
 - Improved large signal handling capability
 - Improved blocking of nearby disturbing signals
 - Higher image frequency suppressionBut:
 - Additional insertion loss reduces receiver sensitivity and hence also the link range (rule of thumb: approximately 3 dB)
 - Higher system costs
3. For some kits, the receiving bandwidth can be chosen optionally

Lower bandwidth results in increased system selectivity and higher receiver sensitivity in case of ASK modulation, but also requires a smaller frequency tolerance of the transmitter.

With these three decisions, follow the flow chart to select the appropriate order number for your RF Design Kit.

If other transmitter or receiver design boards will be operated with the RF Design Kit (e.g., other RF frequencies), these boards can be ordered separately.

The currently supported design boards are listed in Table 1 on page 3. This table lists their features, order numbers, and assignment to the order numbers of the RF Design Kit where they are included.



ATAK57xx RF Design Kit

Selection Guide

Preliminary



Figure 1. Flow Chart

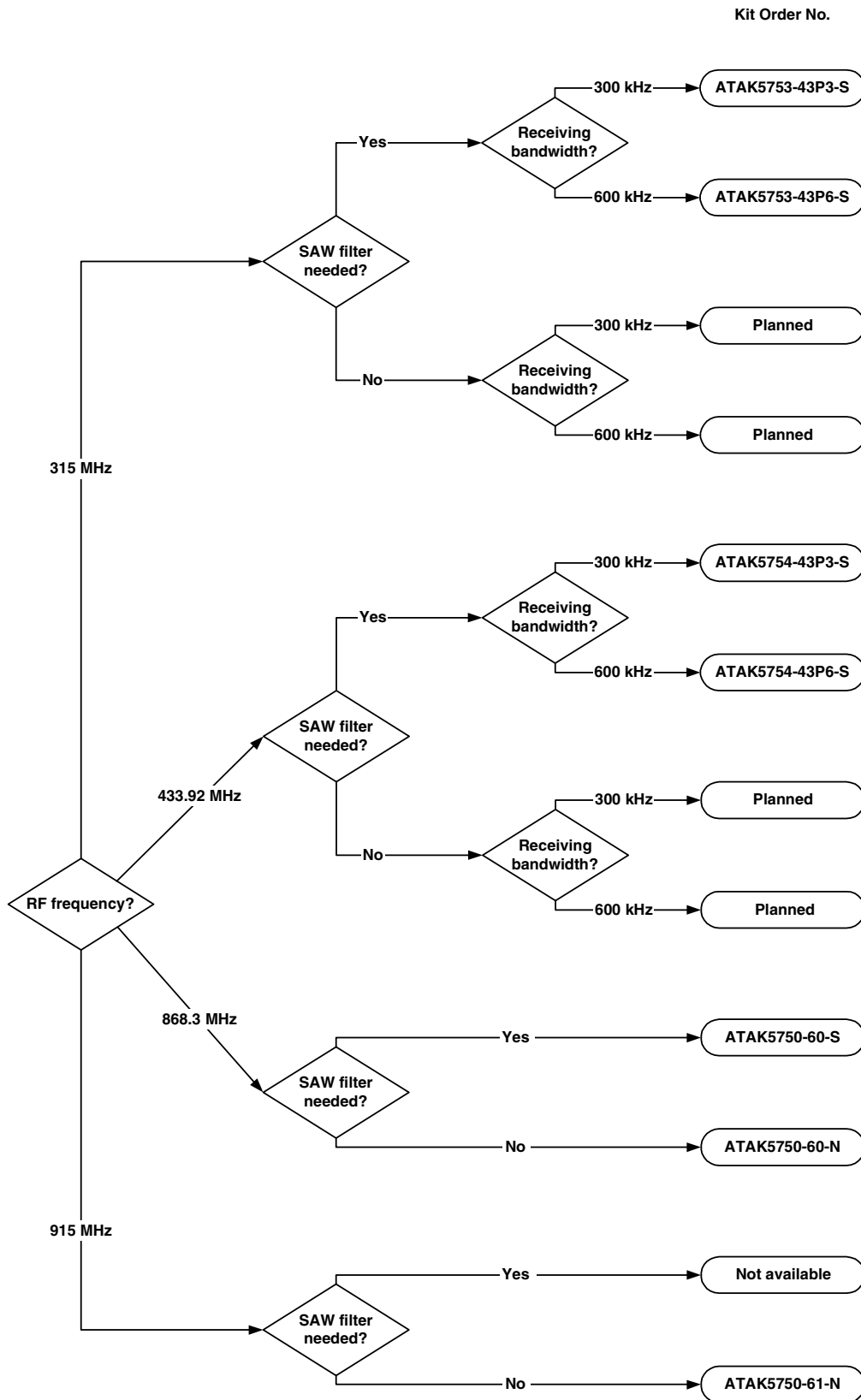


Table 1. Currently Supported Design Boards

Order Number for RF Design Kit	ATAK5750-60-S	ATAK5750-60-N	ATAK5750-61-N	ATAK5753-43P3-S	ATAK5753-43P6-S	ATAK5754-43P3-S	ATAK5754-43P6-S	RF Frequency (MHz)	IF Bandwidth (kHz)	SAW Front End Filter
Transmitter Design Board										
ATAB5750-8	X	X						868.3	-	-
ATAB5750-9			X					915	-	-
ATAB5753				X	X			315	-	-
ATAB5754						X	X	433.92	-	-
Receiver Design Board										
ATAB5760-S	X							868.3	600	Yes
ATAB5760-N		X						868.3	600	No
ATAB5761-N			X					915	600	No
ATAB5743P3-S3				X				315	300	Yes
ATAB5743P6-S3					X			315	600	Yes
ATAB5743P3-S4						X		433.92	300	Yes
ATAB5743P6-S4							X	433.92	600	Yes



Atmel Corporation

2325 Orchard Parkway
San Jose, CA 95131, USA
Tel: 1(408) 441-0311
Fax: 1(408) 487-2600

Regional Headquarters

Europe

Atmel Sarl
Route des Arsenaux 41
Case Postale 80
CH-1705 Fribourg
Switzerland
Tel: (41) 26-426-5555
Fax: (41) 26-426-5500

Asia

Room 1219
Chinachem Golden Plaza
77 Mody Road Tsimshatsui
East Kowloon
Hong Kong
Tel: (852) 2721-9778
Fax: (852) 2722-1369

Japan

9F, Tonetsu Shinkawa Bldg.
1-24-8 Shinkawa
Chuo-ku, Tokyo 104-0033
Japan
Tel: (81) 3-3523-3551
Fax: (81) 3-3523-7581

Atmel Operations

Memory

2325 Orchard Parkway
San Jose, CA 95131, USA
Tel: 1(408) 441-0311
Fax: 1(408) 436-4314

Microcontrollers

2325 Orchard Parkway
San Jose, CA 95131, USA
Tel: 1(408) 441-0311
Fax: 1(408) 436-4314

La Chantrerie
BP 70602
44306 Nantes Cedex 3, France
Tel: (33) 2-40-18-18-18
Fax: (33) 2-40-18-19-60

ASIC/ASSP/Smart Cards

Zone Industrielle
13106 Rousset Cedex, France
Tel: (33) 4-42-53-60-00
Fax: (33) 4-42-53-60-01

1150 East Cheyenne Mtn. Blvd.
Colorado Springs, CO 80906, USA
Tel: 1(719) 576-3300
Fax: 1(719) 540-1759

Scottish Enterprise Technology Park
Maxwell Building
East Kilbride G75 0QR, Scotland
Tel: (44) 1355-803-000
Fax: (44) 1355-242-743

RF/Automotive

Theresienstrasse 2
Postfach 3535
74025 Heilbronn, Germany
Tel: (49) 71-31-67-0
Fax: (49) 71-31-67-2340

1150 East Cheyenne Mtn. Blvd.
Colorado Springs, CO 80906, USA
Tel: 1(719) 576-3300
Fax: 1(719) 540-1759

Biometrics/Imaging/Hi-Rel MPU/ High Speed Converters/RF Datacom

Avenue de Rochepleine
BP 123
38521 Saint-Egreve Cedex, France
Tel: (33) 4-76-58-30-00
Fax: (33) 4-76-58-34-80

Literature Requests

www.atmel.com/literature

Disclaimer: Atmel Corporation makes no warranty for the use of its products, other than those expressly contained in the Company's standard warranty which is detailed in Atmel's Terms and Conditions located on the Company's web site. The Company assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of Atmel are granted by the Company in connection with the sale of Atmel products, expressly or by implication. Atmel's products are not authorized for use as critical components in life support devices or systems.

© Atmel Corporation 2003. All rights reserved.

Atmel® and combinations thereof are the registered trademarks of Atmel Corporation or its subsidiaries.

Other terms and product names may be the trademarks of others.



Printed on recycled paper.

4753A-RKE-08/03