

# *Bluetooth*<sup>TM</sup> Module Evaluation Kit

( For EYSF1SAXX, EYSF1SAJJ, EYSF2SAXX, and EYSF2SAJJ )

## EKSFXSAXX



This evaluation kit is an object for experiment of operation, and does not guarantee quality. Moreover, the conditions of a module of operation are not recommended in the schematic, the parts, the software, etc. currently used for evaluation kit.

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### Rev. record

15-MAY-2001 > Newly issued

31-AUG-2001 > UP-date

# EKSFXSAXX

Tentative

## Introduction

This evaluation kit is developed for communication test of *Bluetooth™* module which TAIYO YUDEN develops and sells.

This evaluation kit makes it possible to perform easily the communication test of *Bluetooth™* module of TAIYO YUDEN.

## Order name

**EKSFXSAXX**

## Conformity module

**EYSF1SAXX, EYSF1SAJJ, EYSF2SAXX, and EYSF2SAXX**

(These modules are supporting UART I/F.)

## Accessories

1	Evaluation Board	2 pieces
2	CD-ROM disk (containing software, software user's manual, Module specification report, and evaluation board user's manual)	1 disc
3	Antenna	2 pieces
4	DC Power Cable	2 pieces
5	Board With Stands	2 sets

## Recommendation operation environment

OS : \*Windows 98, Windows 2000, Windows Me

CPU : \*\*Pentium III 300MHz and Celeron™ 400MHz or more

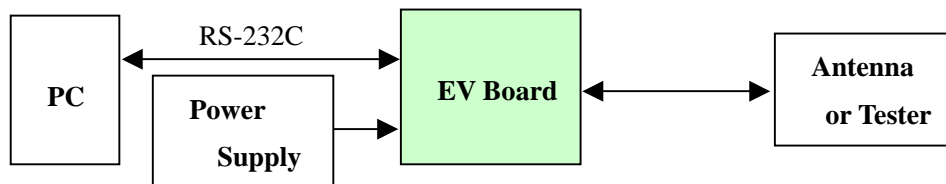
RAM: 64MB or more

I/F : RS-232C

\*Microsoft Windows and WindowsNT are trademarks of Microsoft Corporation.

\*\*Intel Celeron™ and Pentium III are trademarks of Intel Corporation.

The example of connection



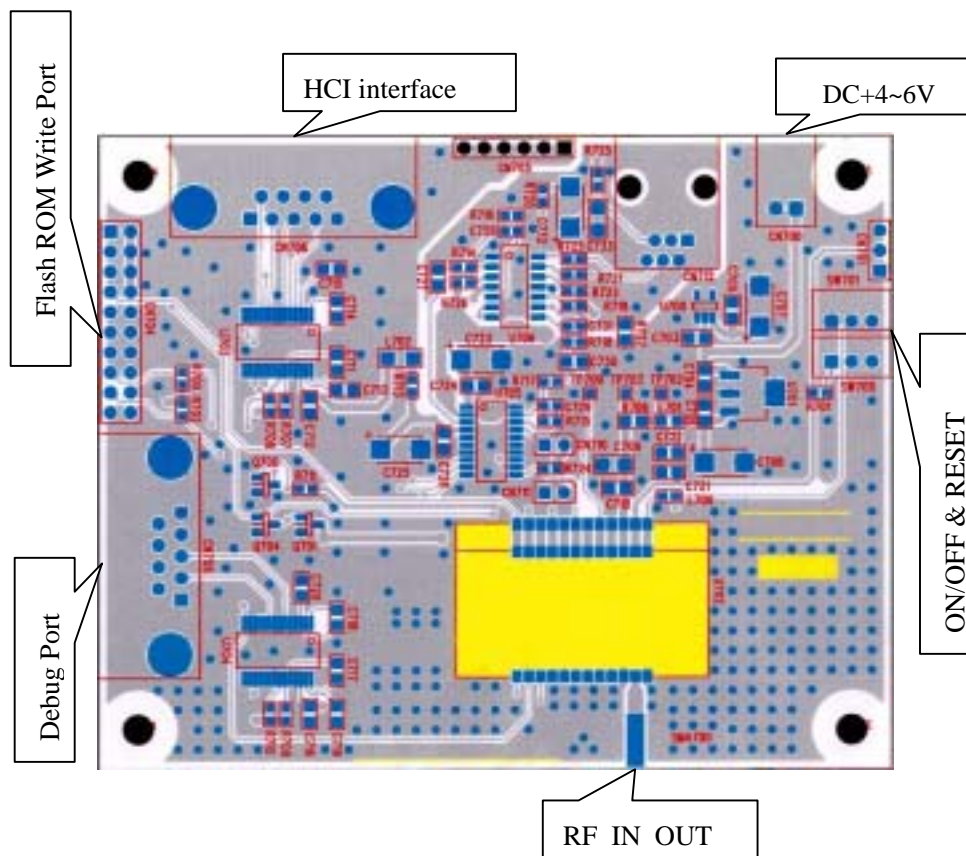
Now, CODEC is not supported.

Evaluation board layout

Board size : 100mm x 80mm

RS-232C connector : D-SUB9(Soket Type)

RF connector : SMA



**Pin description of evaluation board**

CN700(Power Supply)

No.	Pin Name	I/O	Description
1	VIN	Input	Power Supply(DC+4~6V)
2	GND	-	Ground

CN701(ON/OFF &amp; RESET)

No.	Pin Name	I/O	Description
1	/RESET	Input	Active Low Reset
2	BTM_ON	Input	Active High
3	GND	-	Ground

CN704(Flash Rom Write Port)

No.	Pin Name	I/O	Description
1	/RESET	Input	Active Low Reset
2	GND	-	Ground
3	FW E	Input	Do not connect-Flash ROM write port
4	GND	-	Ground
5	N.C	-	No connect
6	GND	-	Ground
7	/MD2	Input	Do not connect-Flash ROM write port
8	GND	-	Ground
9	N.C	-	No connect
10	GND	-	Ground
11	N.C	-	No connect
12	GND	-	Ground
13	N.C	-	No connect
14	GND	-	Ground
15	TXD2	Output	Do not connect-Flash ROM write port
16	GND	-	Ground
17	RXD2	Input	Do not connect-Flash ROM write port
18	3.0V	Output	Do not connect-3.0V Power Supply for Flash ROM writer
19	N.C	-	No connect
20	3.0V	Output	Do not connect-3.0V Power Supply for Flash ROM writer

CN706(RS-232C Interface)

No.	Pin Name	I/O	Description
1	N.C	-	No connect
2	TXD	Output	TX data
3	RXD	Input	RX data
4	DSR	Input	Data set ready
5	GND	-	Ground
6	DTR	Output	Data terminal ready
7	CTS	Input	Flow control signal, Clear to send
8	RTS	Output	Flow control signal, Request to send
9	N.C	-	No connect

CN708(Debug Port)

No.	Pin Name	I/O	Description
1	N.C	-	No connect
2	TXD2	Output	TX data
3	RXD2	Input	RX data
4	N.C	-	No connect
5	GND	-	Ground
6	N.C	-	No connect
7	N.C	-	No connect
8	N.C	-	No connect
9	N.C	-	No connect

SMA700(RF\_IN\_OUT)

No.	Pin Name	I/O	Description
1	ANT_TX_RX	Input/Output	RF In and Out

**EKSFXSAXX**

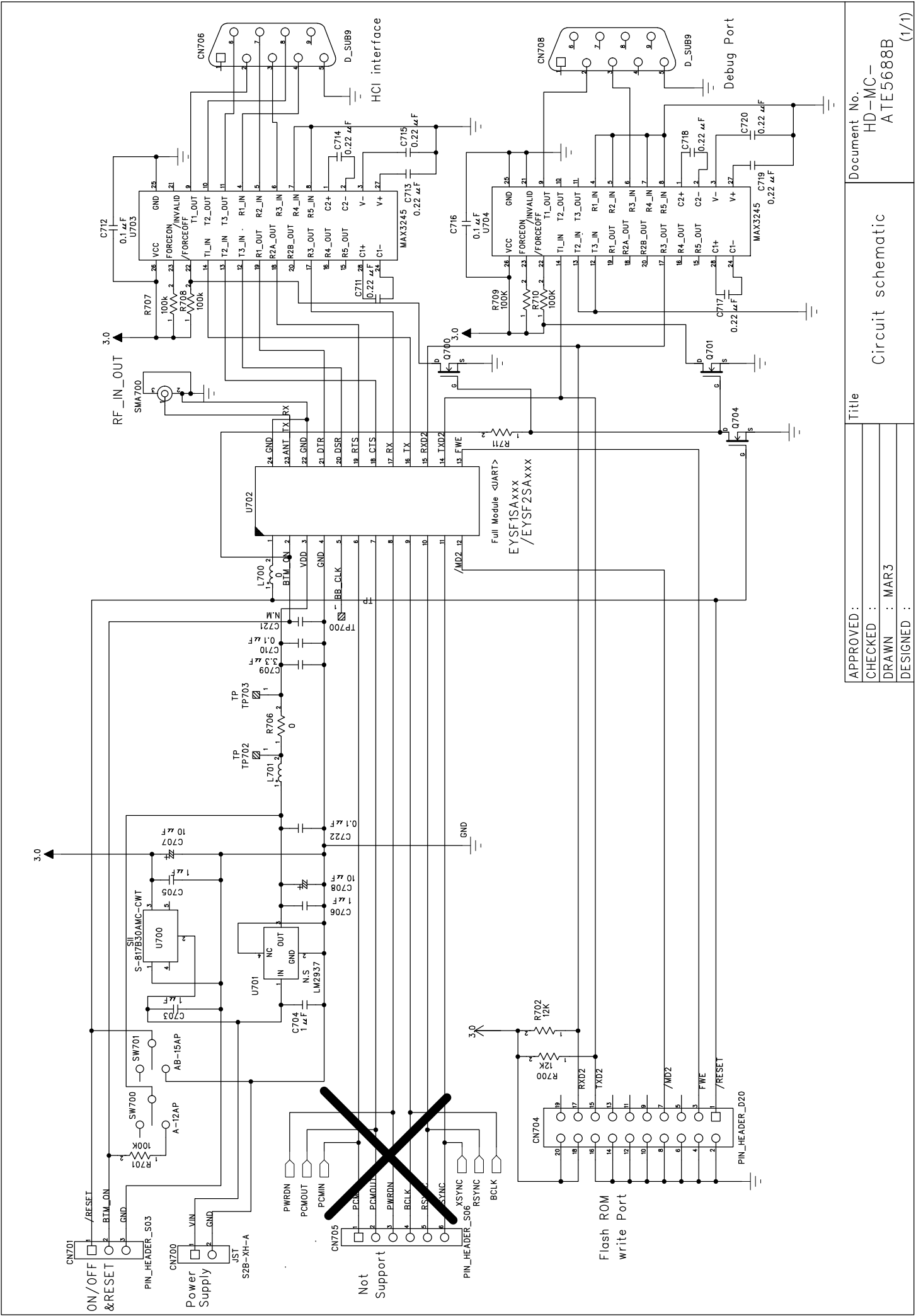
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**BOM of evaluation board**

Parts No	Description	Value	Parts name and standard	Supplier
U700	IC		S-817B30AMC-CWT	SII
U701	IC		LM2937	National Semiconductor
U702	IC		EYSF1SAXX or EYSF1SAJJ or EYSF2SAXX or EYSF2SAJJ	TAIYO YUDEN
U703	IC		MAX3245	MAXIM
U704	IC		MAX3245	MAXIM
CN700	CONNECTOR		S2B-XH-A	JST
CN701			No assembly	-
CN704			No assembly	-
CN706	CONNECTOR		RDEF-9S-LNA	HIROSE
CN708	CONNECTOR		RDEF-9S-LNA	HIROSE
SW700	SWITCH		A-12AP	NKK
SW701	SWITCH		AB-15AP	NKK
C703	CAPACITOR	1uF	EMK212BJ105K	TAIYO YUDEN
C704	CAPACITOR	1uF	EMK212BJ105K	TAIYO YUDEN
C705	CAPACITOR	1uF	EMK212BJ105K	TAIYO YUDEN
C706	CAPACITOR	1uF	EMK212BJ105K	TAIYO YUDEN
C707	CAPACITOR	10uF	TMCM-D 1V 106M	HITACHI AIC
C708	CAPACITOR	10uF	TMCM-D 1V 106M	HITACHI AIC
C709	CAPACITOR	3.3uF	LMK316BJ335K	TAIYO YUDEN
C710	CAPACITOR	0.1uF	UMK212BJ104K	TAIYO YUDEN
C711	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C712	CAPACITOR	0.1uF	UMK212BJ104K	TAIYO YUDEN
C713	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C714	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C715	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C716	CAPACITOR	0.1uF	UMK212BJ104K	TAIYO YUDEN
C717	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C718	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C719	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C720	CAPACITOR	0.22uF	EMK212BJ224K	TAIYO YUDEN
C721			No assembly	-
C722	CAPACITOR	0.1uF	UMK212BJ104K	TAIYO YUDEN
R700	RESISTOR	12k OHM	MCR03 MZS J123	ROHM
R701	RESISTOR	100k OHM	MCR03 MZS J104	ROHM
R702	RESISTOR	12k OHM	MCR03 MZS J123	ROHM
R706	RESISTOR	0 OHM	MCR10 MZS J000	ROHM
R707	RESISTOR	100k OHM	MCR03 MZS J104	ROHM
R708	RESISTOR	100k OHM	MCR03 MZS J104	ROHM
R709	RESISTOR	100k OHM	MCR03 MZS J104	ROHM
R710	RESISTOR	100k OHM	MCR03 MZS J104	ROHM
R711			No assembly	-
L700	RESISTOR	0 OHM	MCR03 MZS J000	ROHM
L701	BEADS		FBMH1608HM221	TAIYO YUDEN
Q701			No assembly	-
Q704			No assembly	-
SMA700	CONNECTOR		82SMA-50-0-1	SUHNER SMA

Schematic of evaluation board

Please refer to the following page



APPROVED :	Title	Document No.
CHECKED :	Circuit schematic	HD-MC-
DRAWN : MAR3		ATE5688B
DESIGNED :		(1/1)

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