WRAP THOR 2022-1 Evaluation Kit

Data Sheet

Version 1.0

Friday, December 10, 2004

blue giga
TECHNOLOGIES

Contents:

List of Tables:

List of Figures:

1. VERSION HISTORY

Version:	Author:	Comments:
1.0	TR	First release

2. TERMS & ABBREVIATIONS

Term or Abbreviation:	Explanation:
ASCII	American Standard Code for Information Interchange
Bluetooth	Set of technologies providing audio and data transfer over short-range radio connections
DTE	Data Terminal Equipment
SPI	Serial Peripheral Interface
UART	Universal Asynchronous Receiver / Transmitter

3. INTRODUCTION

FEATURES

- Evaluation Kit for WRAP THOR 2022-1 *Bluetooth* wireless communication modules
- Unregulated power supply input (5-9V)
- RS-232 serial interface (D9, DTE)
- 16 pin I/O interface (6xGPIO, 4xPCM, RESET, GND, POWER, TxD, RxD and +V)
- USB interface
- SPI for upgrading the firmware and parameters
- BlueGiga ASCII interface as the default firmware

TARGET APPLICATIONS

Evaluation of WRAP THOR 2022-1 *Bluetooth* modules. Prototype and pilot *Bluetooth* systems utilized with WRAP THOR 2022-1 module.

ELECTRICAL FUNCTIONALITY

Please, refer the details of WRAP THOR 2022-1 *Bluetooth* module from the respective data sheet (WRAP THOR 2022-1/2022-1, Data Sheet). The physical outlook, schematics, assembly and the PIN configurations of the interfaces of WRAP THOR 2022-1 Evaluation Kit are described in this document.

4. PHYSICAL OUTLOOK

Figure 1: WRAP THOR 2022-1 Evaluation Kit

5. SCHEMATICS

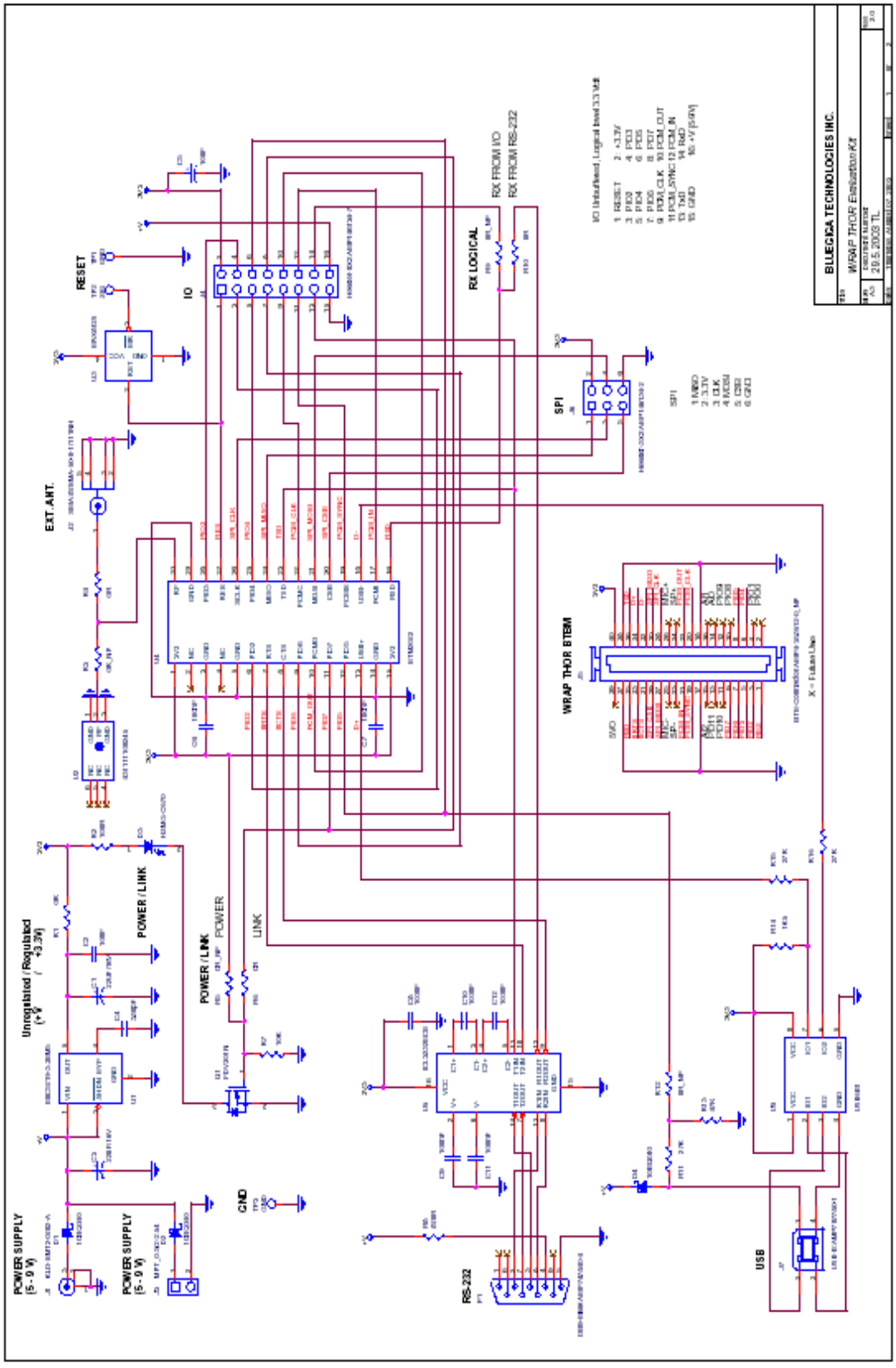

Figure 2: WRAP THOR 2022-1 Evaluation Kit Schematics

6. ASSEMBLY

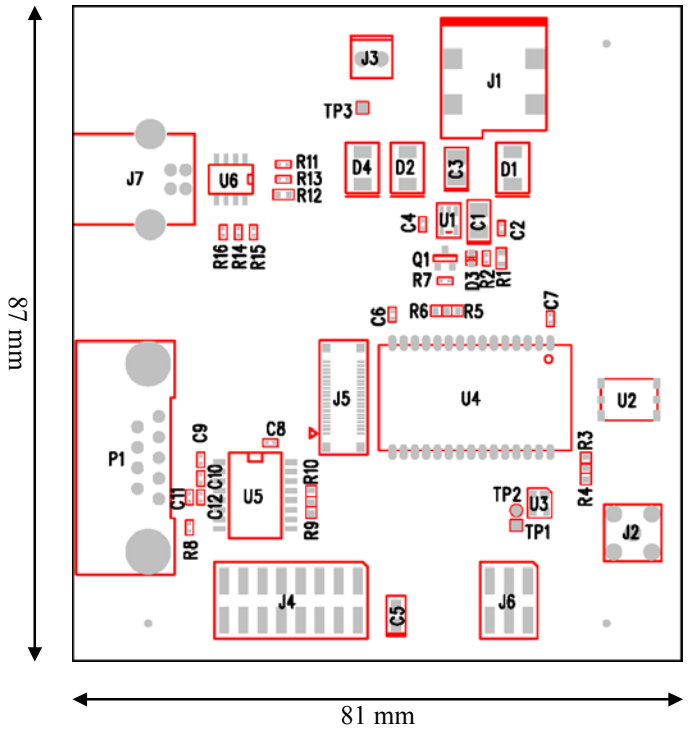

Figure 3: WRAP THOR 2022-1 Evaluation Kit Assembly

7. RS-232 (D9) DTE INTERFACE

RS-232 interface PIN configuration is shown in Table 1. The physical interface is D9-male connector (*AMP747840-4*).

PIN Name:	No.:	I/O:	Description:
NC	1	NC	Not connected
RxD	2	I	RxD
TxD	3	O	TxD
DTR	4	O	DTR on
GND	5	GND	Ground
NC	6	NC	Not connected
RTS	7	O	RTS
CTS	8	I	CTS
NC	9	NC	Not connected

Table 1: RS232 PIN configuration

8. SPI (J6) INTERFACE

SPI interface pin configuration is show in Table 2. The physical interface is 2X3 pin header (*AMP146134-2*).

PIN Name:	No.:	I/O:	Description:
MISO	1	O	MISO
3.3 V	2	POWER	3.3 V power supply input
CLK	3	I	CLK
MOSI	4	I	MOSI
CSB	5	I	CSB
GND	6	GND	GND

Table 2: SPI Interface PIN description

9. GPIO (J4) INTERFACE

General purpose interface pin configuration is show in **Error! Reference source not found.**. The physical interface is 2X8 pin header (*AMP146134-7*).

PIN Name:	No.:	I/O:	Description:
RESET	1	I	Reset
3.3 V	2	POWER	Regulated power supply output (3.3 V)
PIO2	3	I/O	Programmable IO number 2
PIO3	4	I/O	Programmable IO number 3
PIO4	5	I/O	Programmable IO number 4
PIO5	6	I/O	Programmable IO number 5
PIO6	7	I/O	Programmable IO number 6
PIO7	8	I/O	Programmable IO number 7
PCM_CLK	9	I/O	PCM clock
PCM_OUT	10	O	PCM out
PCM_SYNC	11	I/O	PCM synchronization
PCM_IN	12	I	PCM input
TxD	13	O	UART TX
RxD	14	I	UART RX
GND	15	GND	GND
+V	16	POWER	Unregulated power supply output (5-9 V)