
iChip CO2128 with EBI Flash and Telit GSM GC864 Modem

Revision History

Version	Date	Description
1.0	April 2008	Original release
2.0	September 2008	Changed from 1Mb Flash to 2Mb Flash

Introduction

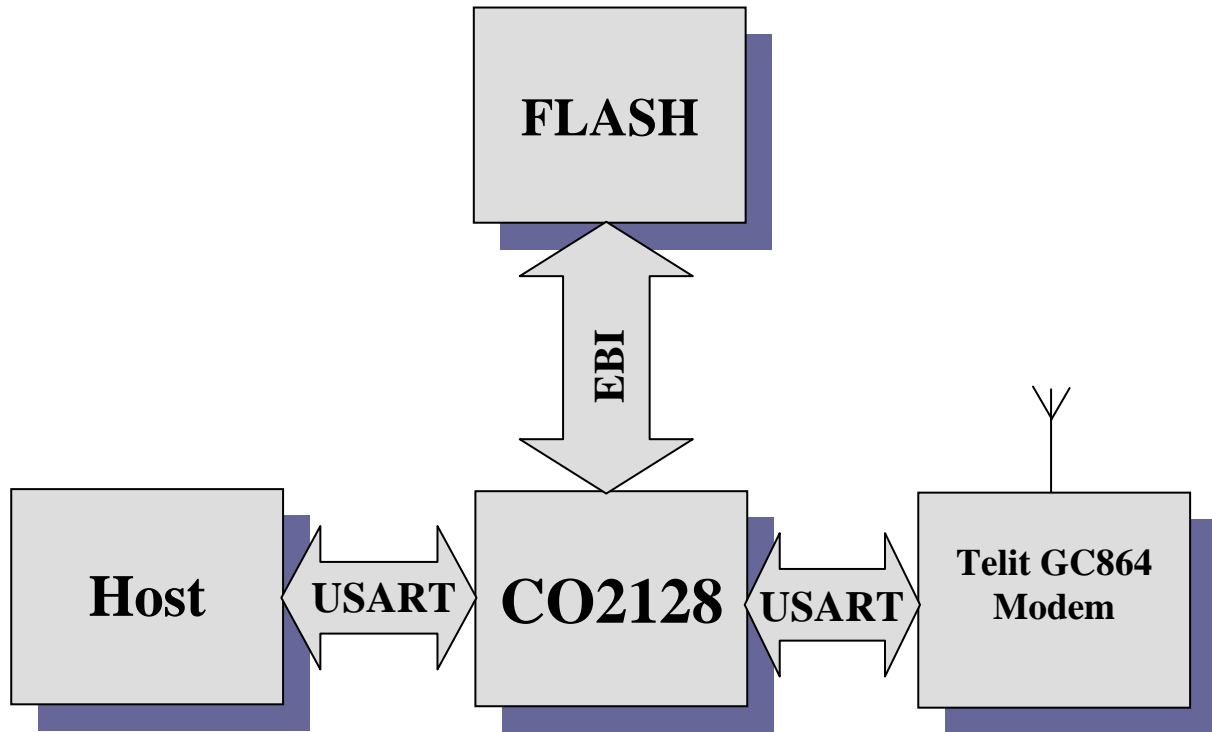
This Reference Design demonstrates the iChip™ CO2128 IP Controller™ connected to a host processor via USART, to a flash memory chip via EBI interface, and to Telit GSM GC864 modem via USART.

Connect One's AT+i™ commands are accepted at baud rates of up to 3Mbps.

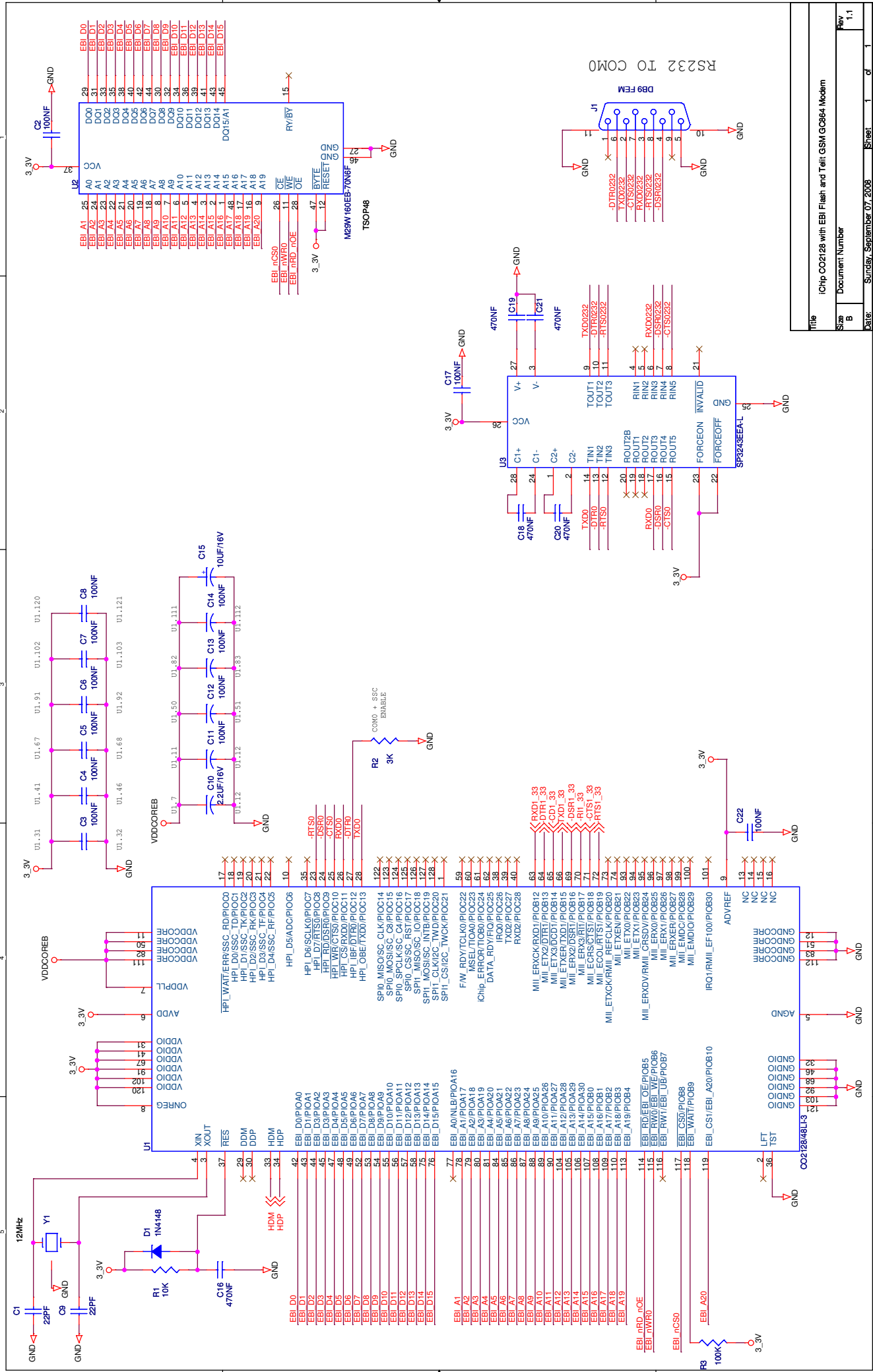
Features

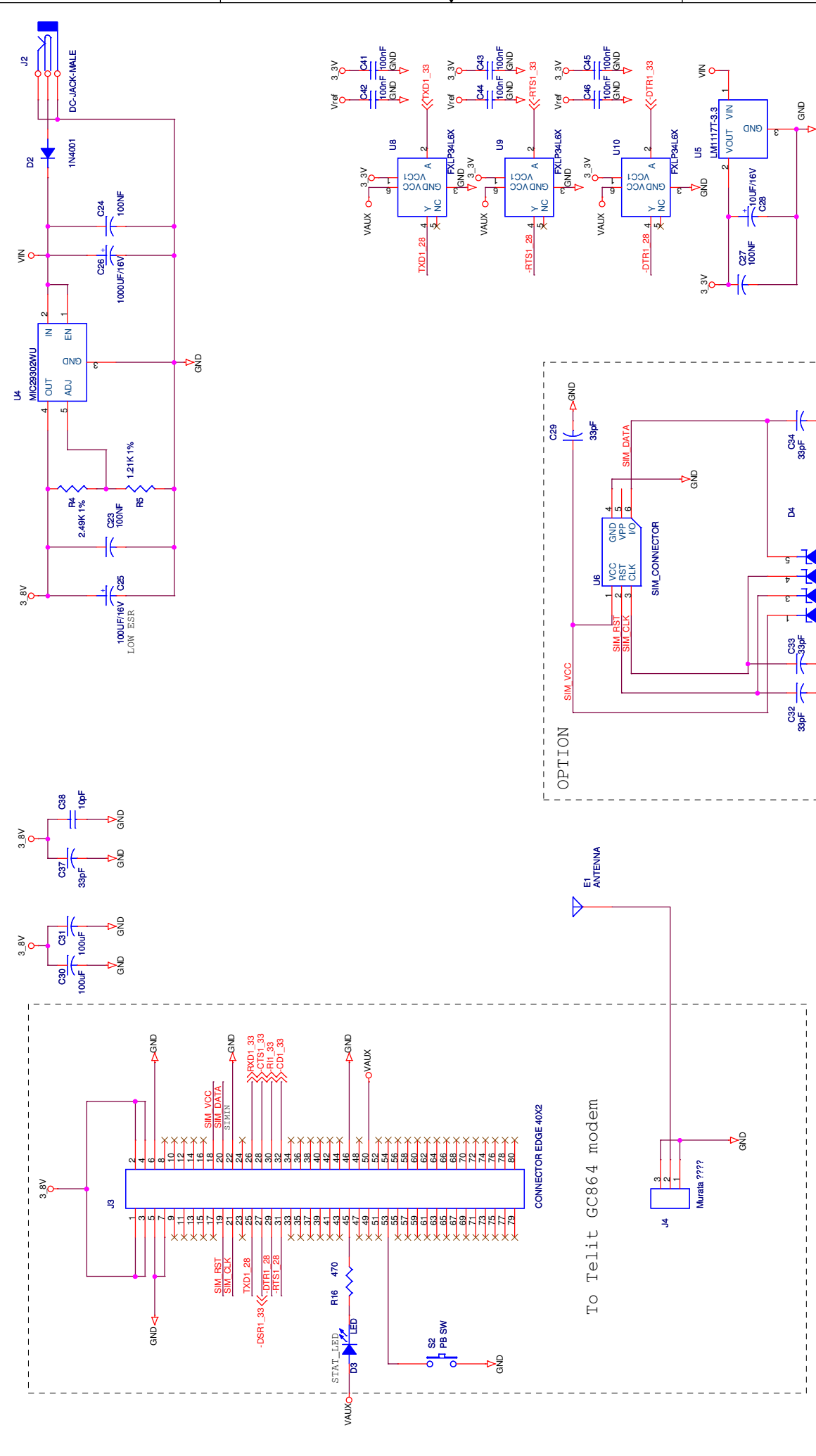
- Supports serial host interface speeds of up to 3Mbps (250K, 1M, 1.5M, 3M)
- SSL3/TLS1 security implemented in hardware provides better performance
- Data and Internet connection through the Telit GSM GC864 modem
- Operates at the industrial temperature range
- RoHS-compliant

Block Diagram

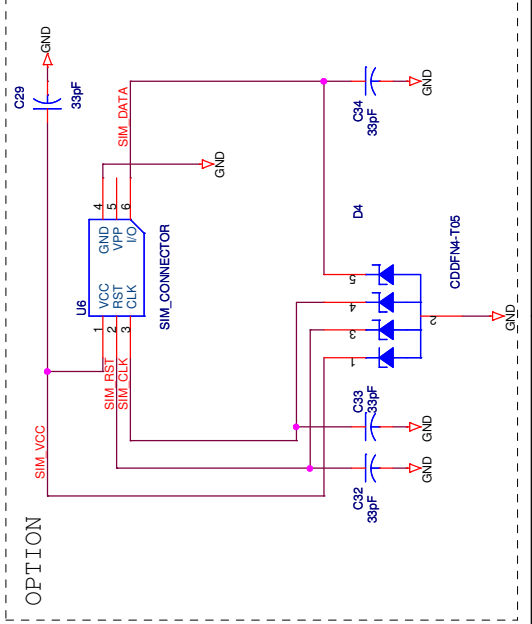


Schematics





Title			
iChip CC2128 with EBI Flash and Telit GSM GC864 Modem			
Size	Document Number		Rev
B			1.1
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Note: RESERVED pin must not be connected.
SIM_VCC=3V.

Bill of Materials

<i>Item</i>	<i>Qty</i>	<i>Reference</i>	<i>Part</i>	<i>Manufacturer</i>
1	2	C1, C9	22pF	Any
2	22	C2, C3, C4, C5, C6, C7, C8, C11, C12, C13, C16, C18, C22, C27, C28, C31, C32, C33, C34, C36, C37, C38	100nF	Any
3	1	C10	2.2μF/16V	Any
4	2	C14, C39	10μF/16V	Any
5	5	C15, C17, C19, C20, C21	470nNF	Any
6	5	C23, C35, C40, C41, C42	33pF	Any
7	2	C24, C25	100μF	Any
8	1	C26	10pF	Any
9	1	C29	100μF/16V	Any
10	1	C30	1000μF/16V	Any
11	1	D1	1N4148	Any
12	1	D2	1N4001	Any
13	1	D3	LED	Any
14	1	D4	CDDFN4-T05	Bourns
15	1	E1	Antenna	50ohm, VSWR≤2:1, Gain>1.5dbi, input power>2W peak
16	1	J1	DB9 FEM	Any
17	1	J2	DC-JACK-MALE	Any
18	1	J3	80 pin 54150-0808	Molex
19	1	J4	MXTK92	Murata
20	1	Q1	BCR148W	Infineon
21	1	R1	10K	Any
22	1	R2	3K	Any
23	1	R3	100K	Any
24	1	R4	2.49K 1%	Any
25	1	R5	1.21K 1%	Any
26	1	R6	470	Any
27	1	S1	PB SW	Any
28	1	U1	CO2128/48LI-3	ConnectOne
29	1	U2	M29W160EB-70N6F	Numonyx
30	1	U3	SP3243EEA-L	Sipex
31	1	U4	MIC29302WU	Micrell

32	3	U5,U6,U8	FXLP34L6X	Fairchild
33	1	U7	SIM_CONNECTOR	Any
34	1	U9	LM1117T-3.3	National Semiconductor
35	1	Y1	12MHz	Any 50ppm