

## 1. Introduction

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EFmaple is a microcontroller board based on Leaf Maple. TheEFmaple can achieve the maximum 72 MHz, it has 39 digital input/output pins, 16 analog inputs, native full speed USB, 3 USARTs (hardware serial ports), integrated SPI/I2C support, with power jack, and reset button. EFmaple is programmable over USB via a provided DFU bootloader, no extra hardware required! Users can also program the onboard program flash via external X-link/X-linkEx JTAG interface. EFmaple offers security support for read/write protected addresses, as well as User and Handler processor modes.EFmaple can be powered by USB or external power supply.

## 2. Feature

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- Maple pins map full compatible for Arduino shield SPI Interface up to 10 MHz
- 72MHz ARM Cortex M3 core; 20KB SRAM and 128KB Flash
- 7 channels of Direct Memory Access(DMA)
- Wide range external input from and USB supply adaptive
- X-link/X-linkEx full compatible
- 工作电压: DC 3-12V
- 尺寸: 68.3mm X 54.3mm

## 3. Application

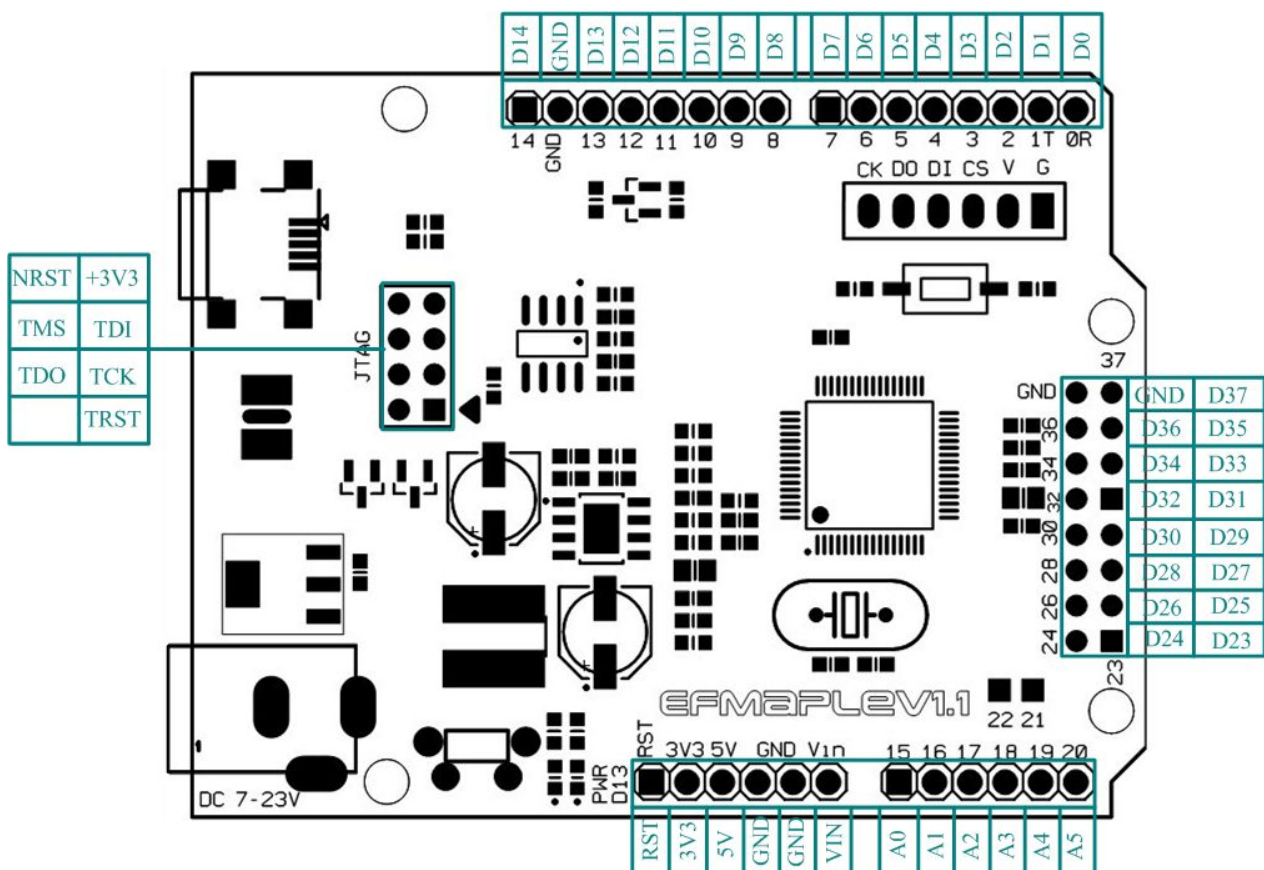
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- Industrial control
- Appliances, building automation control
- Motor drive and application control
- Medical and handheld devices
- PC peripherals and GPS platform

## 4. Electronic Properties

PARAMETER	MIN	TYP	MAX	UNIT
Supply Voltage	3	-	12	V
Supply Voltage	1.5	100	2000	mA
High Input Voltage	3	3.3	3.6	V
Low-level Input Voltage	-0.3	0	0.5	V

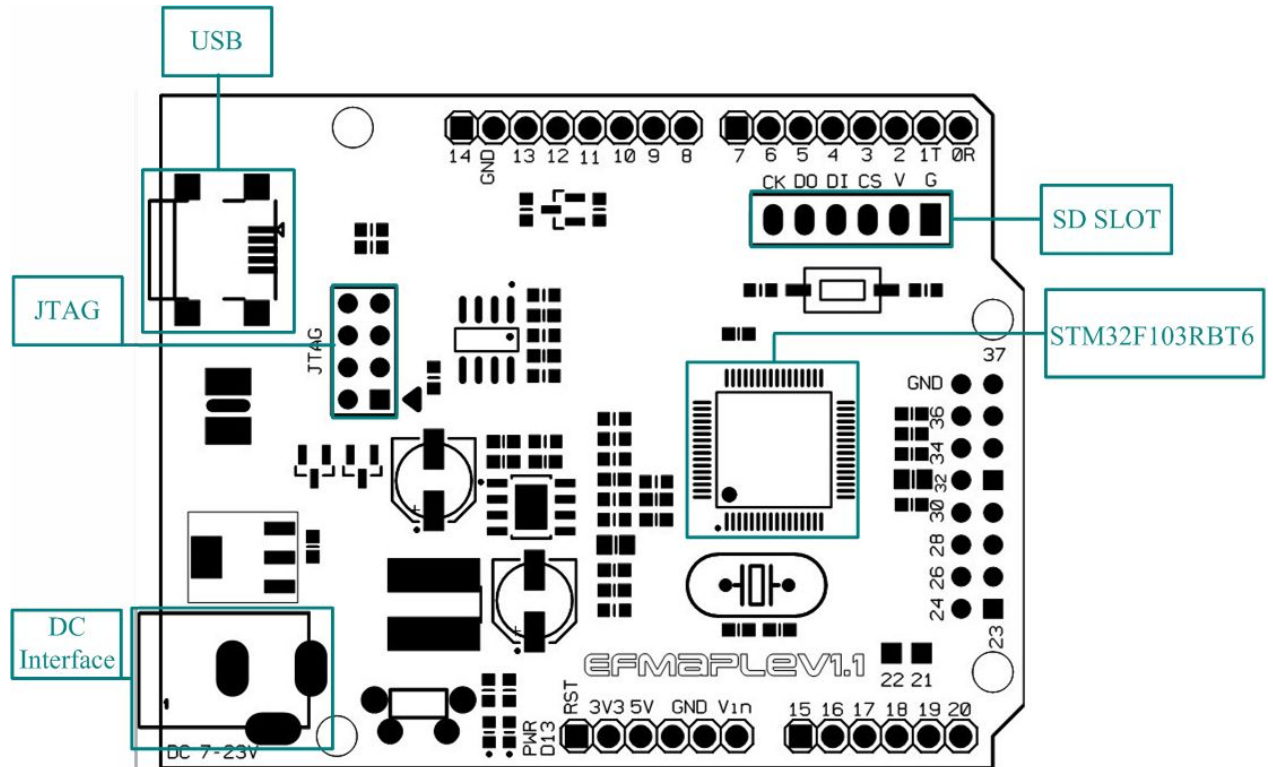
## 5. Interface description



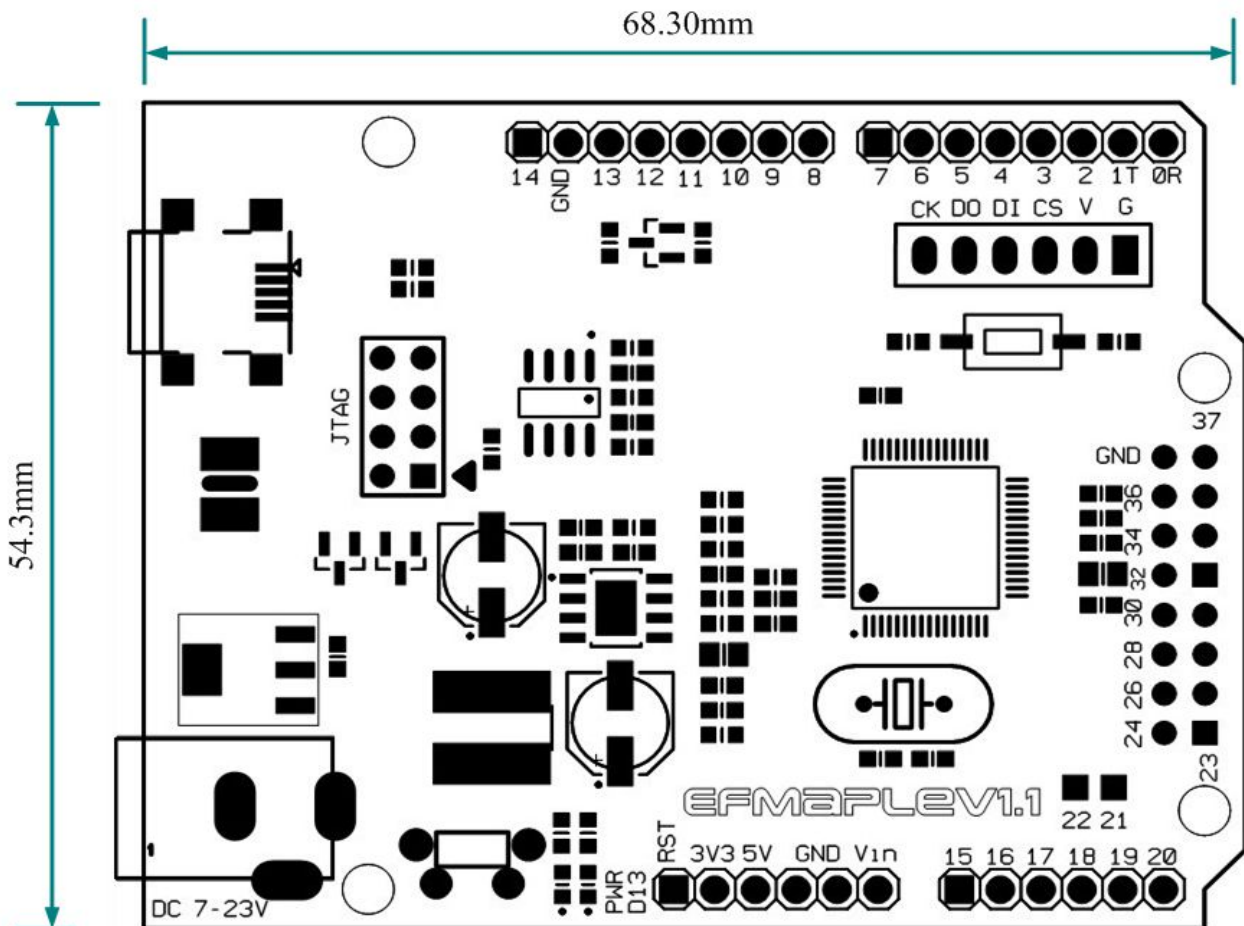
类型	符号	说明
	A0	Maple Analog Port A0
	A1	Maple Analog Port A1
	A2	Maple Analog Port A2
	A3	Maple Analog Port A3
	A4	Maple Analog Port A4
	A5	Maple Analog Port A5
Maple Pin	D0	Maple Communication Pin RX
	D1	Maple Communication Pin TX
	D2	Maple Digital Port D2
	D3	Maple Digital Port D3
	D4	Maple Digital Port D4
	D5	Maple Digital Port D5
	D6	Maple Digital Port D6

Maple Pin	D7	Maple Digital Port D7
	D8	Maple Digital Port D8
	D9	Maple Digital Port D9
	D10	Maple Digital Port D10
	D11	Maple Digital Port D11
	D12	Maple Digital Port D12
	D13	Maple Digital Port D13
	D14	Maple Digital Port D14
	RST	Maple RST port
	GND	Power Ground
	VIN	Adapter Input Power
	3V3	Maple 3.3V Power Supply
	5V	Maple 5V Power Supply
	D23	Maple Digital Port D23
	D24	Maple Digital Port D24
	D25	Maple Digital Port D25
	D26	Maple Digital Port D26
	D27	Maple Digital Port D27
	D28	Maple Digital Port D28
	D29	Maple Digital Port D29
	D30	Maple Digital Port D30
	D31	Maple Digital Port D31
	D32	Maple Digital Port D32
	D33	Maple Digital Port D33
	D34	Maple Digital Port D34
	D35	Maple Digital Port D35
	D36	Maple Digital Port D36
	D37	Maple Digital port D37
	NRST	The NRST JTAG
	3V3	The 3V3 JTAG
	TMS	The TMS JTAG
JTAG PIN	TDI	The TDI JTAG
	TDO	The TDO JTAG
	TCK	The TCK JTAG
	TRST	The TRST JTAG

## 6. Module Description



## 7. Dimension outline



## 8. Revision History

REVISION	DESCRIPTION	RELEASE DATE
V1.1	Initial version	8/13/2013

## 9. Contact Information

如需更多信息请登陆: <http://www.elecfrreaks.com>