Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

deRFbreakout Board
for pluggable radio modules
Datasheet

- The deRFbreakout Board is a general purpose I/O board to interface all pluggable types of dresden elektronik radio modules with custom peripheral hardware.

- Screw terminals and standard pin connectors give easy access all ports of the radio module.

- The standard JTAG programming connectors for AVR and ARM are assembled and the necessary pull-up resistors are onboard.

- The 10-pin screw terminal reserved for power supply connections.

- The board itself has no active components and no power consumption.

Technical Data

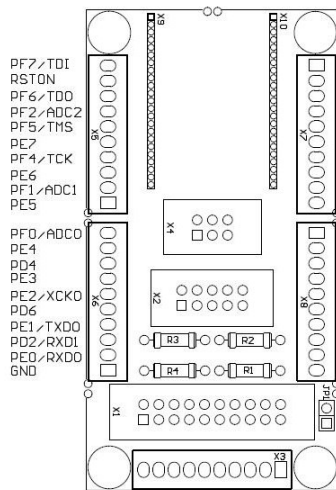|		Technical Data
Dimensions	80 x 42 x 15 mm (without radio module)	
IP protection	IP 00	
Operating temperature	-40 to +85°C	
Interfaces	1 x 10-pin JTAG AVR	
	1 x 20-pin JTAG ARM	
	1 x 6-pin DEBUG	
	1 x 2-pin SAM-BA™ support	
	4 x 10-pin screw terminals for GPIO	
	1 x 10-pin screw terminal for VCC and GND	
	2 x 23-pin socket for deRF radio modules	
Supported Radio Modules	deRFarm7 series (pluggable)	
	deRFmega128 series (pluggable)	
	deRFmega256 series (pluggable)	
	deRFsam3 series (pluggable)	

Board Overlay

PF7/TDI
RSTON
PF6/TDO
PF2/ADC2
PF5/TMS
PE7
PF4/TCK
PE6
PF1/ADC1
PE5

PF0/ADC0
PE4
PD4
PE3
PE2/XCK0
PD6
PE1/TXD0
PD2/RXD1
PE0/RXD0
GND

R3 R2
R4 R1

ARef
PG1
RSTN
PG2
PD0/SCL
PG5
PD1/SDA
PD3/TXD1
PD7
PD5/XCK1

PB1/SCK
CLKI
PB2/MOSI
PB0
PB3/MISO
PB6
PB4
PB7
PB5
GND

TDI
JTAGSEL
TDO
PB1/ETXEN
TMS
PB7/ERXER
TCK
PB5/ERX0
PB28/AD1
PA14/SPIO_NPCS2

PB27/AD0
PB19
USBDP
PB21
PB9/EMDIO
PA4/SPI1_NPCS3
PA28/DTXD
PA0/RXD0
PA27/DRXD
GND

ARef
USBDM
RSTN
PB3/ETX1
PA11/TWCK
PB26
PA10/TWD
PA1/TXD0
PB25
PB2/ETX0

PA18/SPIO_SPCK
PA3/SPI1_NPCS2
PA17/SPIO_MOSI
PB0/ETXCK/EREFCK
PA16/SPIO_MISO
PB8/EMDC
PB6/ERX1
PB18/EF100
PB15/ERXDV
GND

Top View deRFbreakout Board
for deRFmega128 series
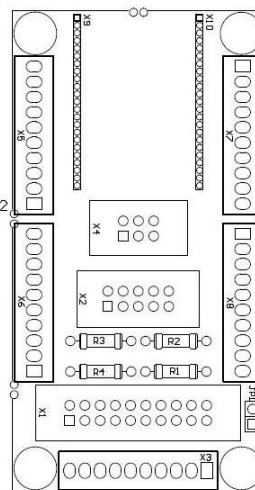
Top View deRFbreakout Board
for deRFarm7 series

Header	Description	Header	Description
X1	JTAG ARM	X6	GPIO
X2	JTAG AVR	X7	GPIO
X3	Power Supply (5xVCC, 5xGND)	X8	GPIO
		X9	Radio module socket
X4	DEBUG	X10	Radio module socket
X5	GPIO	JP1	connect TCK with RTCK → support for SAM-BA™

For boards with product number #32689 on the PCB
The pin number markings '35' and '36' are wrong. The correct designation must be decreased by 1, which means '35' becomes '34' and '36' becomes '35'.

Scope of delivery
deRFbreakout Board

Order No.
BN-032688

Accessories (optional)
RS232 Level Shifter   BN-028560
USB Level Shifter Stick Basic   BN-031648
USB Level Shifter Stick Low Power   BN-031645

Order online: https://shop.dresden-elektronik.de