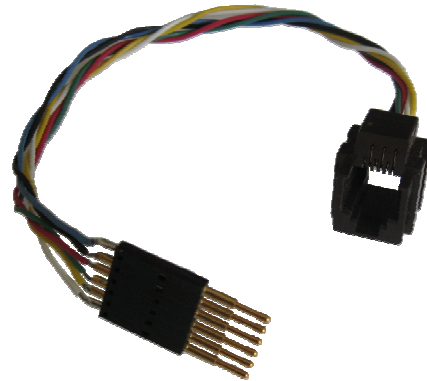# Au RJ12 Pogo Cable User Manual
(Part#: CBL-RJ12-POGO)

Rev. C

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Au Group Electronics RJ12 POGO cable is an RJ12 flexible cable combined with 6-pin POGO connector. It is widely used for programming PIC MCUs on circuit boards. One end of the cable is a RJ12 female connector, the other end is a 6-pin Pogo connector. There are 6 pogo pins mounted in the Pogo header fixture in a row with standard pitch at 0.100"[2.54mm].
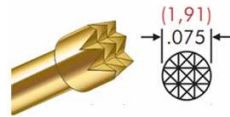
Specification:

- Nominal centers: 0.100 inch[2.54mm]
- Current rating: 3 amps continuous
- Spring force: 4.0 oz each pin @ 0.100 inch travel
- Typical contact resistance: < 60 mOhm
- Working travel distance: 0.100~0.160 inch
- Pogo pin material: BeCu with gold plated
- Three fixture colors available: blue, white, black.
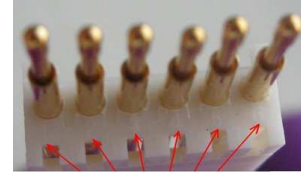- Two types of pin headers: Radius / Serrated

Pogo pin header type:

Radius Pin Header   Serrated Pin Header

Pin # on the POGO fixture:

1 2 3 4 5 6
Pin # indicated on fixture

Recommended PCB pads pattern:

Recommended PCB pattern for radius pin header: ID = 1 mm, OD = 2mm, pin pitch = 2.54 mm (100 mil).	 Φ: 2mm Φ: 1mm 2.54mm (100mil)
Recommended PCB pattern for serrated pin header: OD = 2mm, pin pitch = 2.54 mm (100 mil).	 Φ: 2mm 2.54mm (100mil)

ICSP Signals when connect with BB0703/BB0703+:

Au RJ12 POGO cable can be connected with Au Group Electronics **BB0703 / BB0703+** programmer via an RJ12 ***Reverse*** cable.

When RS12 Pogo Cable is connecting with BB0703/BB0703+ via an RJ12 Reverse cable, the ICSP signal definition on the Pogo pin is listed as:

POGO Pin #	Color Code	Signals (connect to **BB0703**)
1	White	Vpp
2	Black	Vdd
3	Red	GND
4	Green	PGD
5	Yellow	PGC
6	Blue	Aux/Not used

ICSP Signals when connect with ICD2 / ICD3:

Au RJ12 POGO cable can be connected with Microchip ICD2/ICD3, RealICE Programmer via an RJ12 ***Standard*** cable.

When RS12 Pogo Cable is connecting with ICD2 via an RJ12 Standard cable, the ICSP signal definition on the Pogo pin is listed in table below.

MPLAB ICD 2 RJ-12 Jack Pinout

Pin	Signal
Not Used	1
PGC	2
PGD	3
Ground	4
Vdd	5
MCLR/Vpp	6

Pogo Pin #	Color Code	Signals (connect to **ICD2**)
1	White	Not Used
2	Black	ICSPCLK
3	Red	ICSPDAT
4	Green	GND
5	Yellow	VDD
6	Blue	VPP

When RS12 Pogo Cable is connecting with ICD3 via an RJ12 Standard cable, the ICSP signal definition on the Pogo pin is listed in table below.

MPLAB ICD 3 RJ-11 Jack Pinout

Pin	Signal
LVP	1
PGC	2
PGD	3
Ground	4
Vdd	5
MCLR/Vpp	6

Pogo Pin #	Color Code	Signals (connect to **ICD3**)
1	White	LVP
2	Black	ICSPCLK
3	Red	ICSPDAT
4	Green	GND
5	Yellow	VDD
6	Blue	VPP

ICSP Signals when connect with third party programmer:

Au RJ12 POGO cable can also be connected with any third part programmer with ICD2 compatible RJ12 connector. Please be aware that each programmer's ICSP pin-out definition may be different. Please always refer to the programmer's specification for correct ICSP pin-outs.