

# Universal Development Kit - UDK

UDK It is the universal interface intended for hook up to PC of different devices

## UDK Includes:

*Universal Development Interface - UDI*

*Universal Programming Interface - UPI*

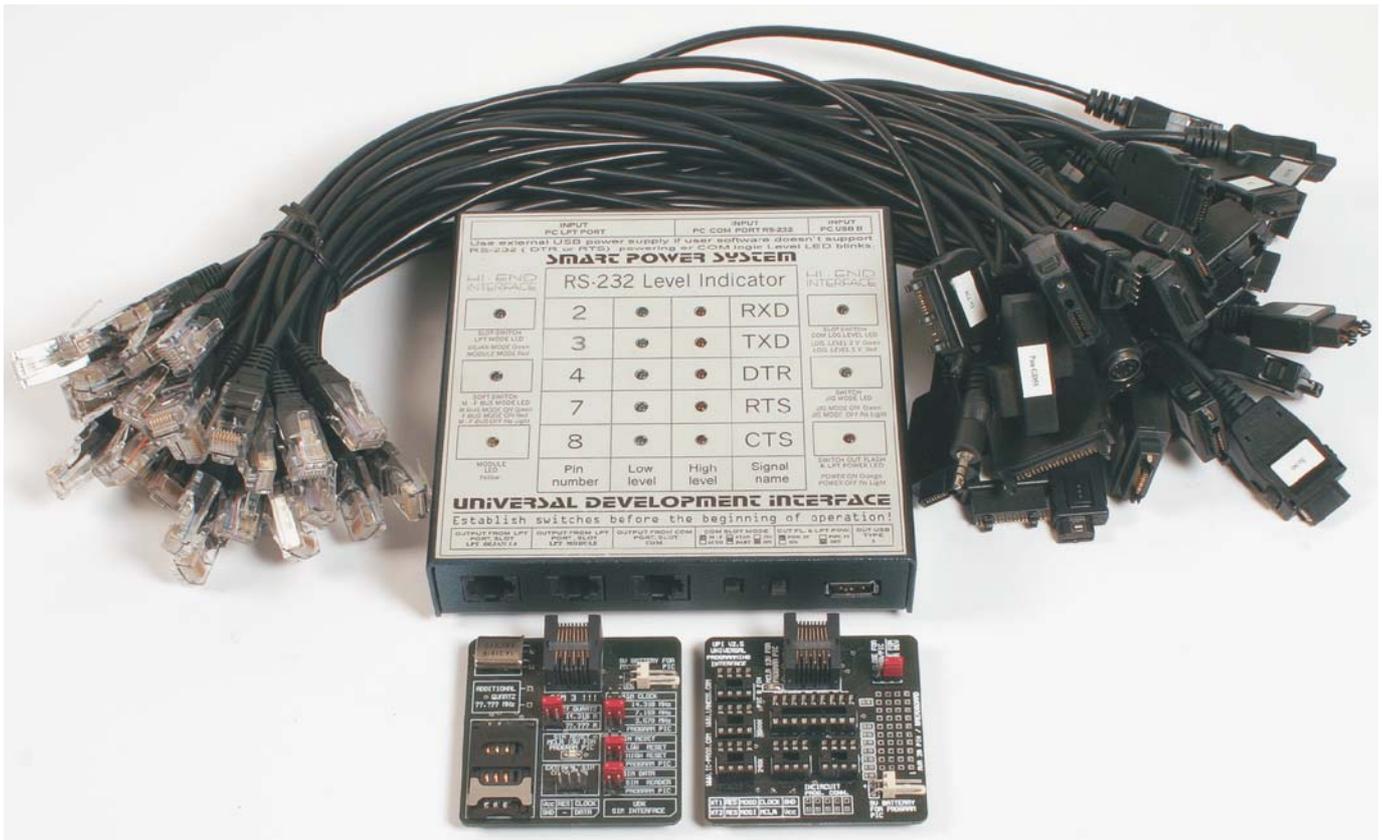
*Universal SIM Interface - USI*

*Terminator Dongle Module - TDM*

*Cables for connecting GSM Phones to UDI*

*Cables for connecting UDI to PC*

*Cable for connecting UPI and USI to UDK*



## Features of UDI:

- Based on MAX3232.
- Dejan LPT FLASHING interface built-in in UDI.
- Possibility to add built-in modules, for example: Terminator, Prodigy, Emmi.
- 1 USB host built-in.
- M Bus / F Bus software autoswitch with LED indicator.
- JIG MODE built-in with LED indicator.
- 5V test voltage for flashing with LED indicator.
- Smart Power System with 3V/5V logic level slot-switching for compatibility with new and old phones.
- Low Power indicator built-in.
- RS232 Level Indicator built-in.
- 3V logic level indicator built-in.
- 5V logic level indicator built-in.
- Can take power from the COM port.
- Can take power from the USB port.

# Universal Development Interface - UDI 3.0

## UDI it is next generation of professional HI-END GSM BOX



INPUT PC LPT PORT		INPUT PC COM PORT RS-232		INPUT PC USB B	
Use external USB power supply if user software doesn't support RS-232 ( DTR or RTS) powering or COM logic Level LED blinks.					
<b>SMART POWER SYSTEM</b>					
HI-END INTERFACE		<b>RS-232 Level Indicator</b>		HI-END INTERFACE	
	2			RXD	
<small>SLOT-SWITCH LPT MODE LED DEJAN MODE Green MODULE MODE Red</small>	3			TXD	<small>SLOT-SWITCH COM LOG.LEVEL LED LOG. LEVEL 3 V Green LOG. LEVEL 5 V Red</small>
	4			DTR	
<small>SOFT-SWITCH M - F BUS MODE LED M BUS MODE ON Green F BUS MODE ON Red M - F BUS OFF No Light</small>	7			RTS	<small>SWITCH JIG MODE LED JIG MODE ON Green JIG MODE OFF No Light</small>
	8			CTS	
<small>MODULE LED Yellow</small>	Pin number	Low level	High level	Signal name	<small>SWITCH OUT FLASH &amp; LPT POWER LED POWER ON Orange POWER OFF No Light</small>
<b>UNIVERSAL DEVELOPMENT INTERFACE</b>					
Establish switches before the beginning of operation!					
<small>OUTPUT FROM LPT PORT, SLOT LPT DEJAN 1.0</small>	<small>OUTPUT FROM LPT PORT, SLOT LPT MODULE</small>	<small>OUTPUT FROM COM PORT, SLOT COM</small>	<small>COM SLOT MODE M - F AUTO STAN JIG ON</small>	<small>OUT FL. &amp; LPT POW. POW. ON POW. OFF</small>	<small>OUT USB TYPE A</small>

**LPT DEJAN 1.0** Slot for Dejan lpt flashing Interface (Nokia phones).  
The slot is activated at hook up Nokia adaptor RJ45-MINIDIN 6 (PS2)

**LPT MODULE** Slot for built-in lpt module.

**COM** Multifunction slot of COM port:

1. Slot for most phones
2. Program EEPROM I2C,SPI, SD BUS, MICROWIRE without special adaptors,
3. Program EEPROM I2C including in SAMSUNG phones (the special EEPROM cable is required).
4. Program EEPROM I2C,SPI, SD BUS, MICROWIRE, PIC controller, ATMEL controller, EEPROM with special adaptors - UPI.
5. Program MOTOROLA 68HC05, 68HC705, 68HC11 processors in carradio.
6. Connect SIM card readers - USI.

**INPUT PC USB B / OUT USB TYPE A** USB host through UDI .

**MODE OF COM SLOT** The switch of three conditions:

1. **M - F AUTO** Mode for phones Nokia, Bosch CBus. FBus or MBus mode switches your software. FBus mode RTS - OFF, MBus mode RTS - ON
2. **STANDART** Mode for most phones, USI, UPI.
3. **JIG ON** Mode intended for flash of some models of SAMSUNG phones. It is required special flash cable.

**OUT FLASH & LPT POWER** The switch of two conditions:

1. **POWER 5V OFF**
2. **POWER 5V ON**

The switch executes simultaneously two functions.

1. Switches an exit 5 volts on pin 8 of the slot COM.
2. Switches power supply slot LPT DEJAN 1.0 flashing interface and slot LPT MODULE.

### OPERATING INSTRUCTIONS:

Connect the UDI to your PC in COM, LPT and USB port.

Choose now the operating mode and connect the phone cable and the phone.

The complete power supply UDK is carried out from USB port.

In exclusive cases the operation of the slot COM, the power supply from COM port is authorized, but thus the operation UDI is not guaranteed.

### OPERATING MODE EXAMPLES FOR VARIOUS PHONES:

- Nokia Phones unlock, slot COM, enable F-M AUTO mode, FBus or MBus mode switches your software.
- Nokia Phones flash, slot DEJAN 1.0, enable SWITCH OUT FLASH & LPT POWER supply to operate.
- Ericsson Phones, enable STANDART mode and also the SWITCH OUT FLASH & LPT POWER supply to operate. The switch gives TEST/FLASH voltage to the phone.
- Motorola T191 and T205 enable STANDART mode to operate.
- Motorola V60/66/70, enable STANDART mode and also the SWITCH OUT FLASH & LPT POWER supply to operate.
- Siemens Phones, enable STANDART mode to operate.
- Alcatel Phones, enable STANDART mode to operate.
- Panasonic Phones, enable STANDART mode to operate.
- Sony Phones, enable STANDART mode to operate.  
(For Z5 and CD5 it's needed sometimes to enable SWITCH OUT FLASH & LPT POWER supply!)
- Philips Phones, enable STANDART mode to operate.
- Bosch Phones, enable F-M AUTO mode to operate.
- Sagem Phones, enable STANDART mode to operate.
- Trium Phones, enable STANDART mode to operate, for flashing phone you must enable the SWITCH OUT FLASH & LPT POWER supply!.
- Trium M330, enable STANDART mode to operate.
- Samsung Phones, enable STANDART mode and also the SWITCH OUT FLASH & LPT POWER supply to operate.
- Samsung A300 flash, enable JIG ON mode and also the SWITCH OUT FLASH & LPT POWER supply to operate.
- LG Phones, enable STANDART mode to operate.
- Sharp Phones, enable STANDART mode to operate.
- Sendo Phones, enable STANDART mode and also the SWITCH OUT FLASH & LPT POWER supply to operate. The switch gives Power Supply voltage to the phone.

# Cables for connecting GSM Phones to UDI

Nr.	NAME OF CABLE	NAME OF PHONE	SUPPORT FOLLOWING MODELS:	NAME OF SLOT	SWITCH MODE OF COM SLOT	SWITCH OUT FLASH & LPT POWER supply	UN-LOCK	FLASH	LOGO MELODY (GPRS)
1	RJ45-M.DIN6 (PS2)	FOR NOKIA	ALL NOK.	COM/DEJ	M-F AUTO/-	POW. OFF/ON <sup>4</sup>			
2	NOK 1100	FOR NOKIA	1100	COM	M-F AUTO	POW. OFF	?		+
3	NOK 3110	FOR NOKIA	1610/3110/8110	COM	M-F AUTO	POW. OFF	+	+	
4	NOK 3210	FOR NOKIA	3210	COM/DEJ	M-F AUTO/-	POW. OFF/ON <sup>4</sup>	+	+	+
5	NOK 3310	FOR NOKIA	3310/3330/3410	COM/DEJ	M-F AUTO/-	POW. OFF/ON <sup>4</sup>	+	+	+
6	NOK 3300	FOR NOKIA	3300	COM	M-F AUTO	POW. OFF	?		+
7	NOK 3510	FOR NOKIA	3510	COM	M-F AUTO	POW. OFF	?		+
8	NOK 3650	FOR NOKIA	3650	COM	M-F AUTO	POW. OFF	?		+
9	NOK 5100	FOR NOKIA	5100	COM	M-F AUTO	POW. OFF	?		+
10	NOK 6100	FOR NOKIA	6100	COM	M-F AUTO	POW. OFF	?		+
11	NOK 6110	FOR NOKIA	5110/6110/7110	COM/DEJ	M-F AUTO/-	POW. OFF/ON <sup>4</sup>	+	+	+
12	NOK 6600	FOR NOKIA	6600	COM	M-F AUTO	POW. OFF	?		+
13	NOK 6650	FOR NOKIA	6650	COM	M-F AUTO	POW. OFF	?		+
14	NOK 6800	FOR NOKIA	6800	COM	M-F AUTO	POW. OFF	?		+
15	NOK 7210	FOR NOKIA	7210/7250/6610	COM	M-F AUTO	POW. OFF	?		+
16	NOK 7650	FOR NOKIA	7650	COM	M-F AUTO	POW. OFF	?		+
17	NOK 8210	FOR NOKIA	8210/8850/2100/5210	COM/DEJ	M-F AUTO/-	POW. OFF/ON <sup>4</sup>	+	+	+
18	NOK 8310	FOR NOKIA	8310/6510	COM	M-F AUTO	POW. OFF	?		+
19	NOK 8910	FOR NOKIA	8910	COM	M-F AUTO	POW. OFF	?		+
20	NOK 9210	FOR NOKIA	9110/9210	COM	M-F AUTO	POW. OFF	?		+
21	NOK POP-PORT	FOR NOKIA	3100/3200/5100/6100/6610/6800/7210	COM	M-F AUTO	POW. OFF	?		+
22	NOK N-GAGE	FOR NOKIA	N-GAGE	COM	M-F AUTO	POW. OFF	?		+
23	ERI 388	FOR ERICSSON	237/337/388	COM	STANDART	POW. ON <sup>3</sup>	+	+	+
24	ERI 768	FOR ERICSSON	628/688/788/888/T10/18/A1018	COM	STANDART	POW. ON <sup>3</sup>	+	+	+
25	ERI T28	FOR ERICSSON	T20/T28/A2618/R310/R320	COM	STANDART	POW. ON <sup>3</sup>	+	+	+/?
26	ERI TERMINATOR <sup>1</sup>	FOR ERICSSON	T2x/T3x/T6x/T10x/T20x/R520/P800	MODULE	-	POW. ON <sup>4</sup>	+	+	+
27	SIE S6	FOR SIEMENS	S6	COM	STANDART	POW. OFF	+	+	
28	SIE S10	FOR SIEMENS	S10	COM	STANDART	POW. OFF	+	+	
29	SIE C30	FOR SIEMENS	S30	COM	STANDART	POW. OFF	+	+	+
30	SIE S35	FOR SIEMENS	25/35/36/45	COM	STANDART	POW. OFF	+	+	+
31	SIE S40	FOR SIEMENS	S40	COM	STANDART	POW. OFF	+	+	+
32	SIE C55	FOR SIEMENS	C55/S55/M55	COM	STANDART	POW. OFF	+	+	+
33	PAN G500	FOR PANAS.	G450/G500	COM	STANDART	POW. OFF	+	+	+
34	PAN G600	FOR PANAS.	G520/G600	COM	STANDART	POW. OFF	+	+	
35	PAN Gd90	FOR PANAS.	GD30/GD70/GD90	COM	STANDART	POW. OFF	+	+	+
36	PAN Gd92	FOR PANAS.	GD52/GD67/GD92/GD93/GD95	COM	STANDART	POW. OFF	+	+	+
37	PAN Gd35	FOR PANAS.	Gd35	COM	STANDART	POW. OFF	+	+	+
38	PAN Gd55	FOR PANAS.	Gd55	COM	STANDART	POW. OFF	+	+	+
39	SAG 835	FOR SAGEM	515/61x/7xx/8xx/8300	COM	STANDART	POW. OFF	+	+	
40	SAG 9XX	FOR SAGEM	9xx/MY-X3/MY-X5	COM	STANDART	POW. OFF	+	+	+
41	SAG MYC-2	FOR SAGEM	MYC-2	COM	STANDART	POW. OFF	+	+	+
42	BOS 509	FOR BOSCH	5xx/6xx/7xx	COM	STANDART	POW. OFF	+	+	
43	BOS 908	FOR BOSCH	9xx	COM	STANDART	POW. OFF	+	+	
44	ALC BE	FOR ALCATEL	DB/3xx/5xx/7xx	COM	STANDART	POW. OFF	+	+	?
45	ALC Ot511	FOR ALCATEL	BF/310/311/510/511	COM	STANDART	POW. OFF	+	+	+
46	ALC Ot525	FOR ALCATEL	BG/OT525	COM	STANDART	POW. OFF	+	+	+
47	ALC Ot715	FOR ALCATEL	BF/OT715	COM	STANDART	POW. OFF	+	+	+
48	ALC Ot535	FOR ALCATEL	BH4/OT535	COM	STANDART	POW. OFF	+	+	+
49	ALC Ot320	FOR ALCATEL	XG1/OT320	COM	STANDART	POW. OFF	+	+	+
50	SOY Z5	FOR SONY	CMD-C5/Z5/Z15/Z18	COM	STANDART	POW. ON <sup>5</sup>	+	+	+
51	SOY J5	FOR SONY	CMD-J5/J7/J70	COM	STANDART	POW. OFF	+	+	
52	SOY J5 MODEM <sup>2</sup>	FOR SONY	CMD-J5/J7/J70	COM	STANDART	POW. OFF			+
53	PHIE SAVVY	FOR PHILIPS	SAVVY/AZALIS/FISIO	COM	STANDART	POW. OFF	+	+	+
54	MOT 191	FOR MOTOROLA	T191	COM	STANDART	POW. OFF	+	+	
55	MOT 205	FOR MOTOROLA	T205/T2688	COM	STANDART	POW. OFF	+	+	
56	MOT V66	FOR MOTOROLA	V60/V66/V70	COM	STANDART	POW. ON	+	+	
57	MOT C350 <sup>2</sup>	FOR MOTOROLA	C330/C350	USB-A	-	POW. OFF	+	+	
58	MIT TRIUM ARIA	FOR MIT TRIUM	ARIA	COM	STANDART	POW. ON <sup>5</sup>	+	+	?
59	MIT TRIUM ASTRAL	FOR MIT TRIUM	ASTRAL/GALAXY/GEO	COM	STANDART	POW. ON <sup>5</sup>	+	+	?
60	MIT TRIUM MARS	FOR MIT TRIUM	MARS/NEPTUN	COM	STANDART	POW. ON <sup>5</sup>	+	+	?
61	MIT TRIUM M330	FOR MIT TRIUM	M320/330/M3221/110	COM	STANDART	POW. ON	+	?	?
62	LG 200	FOR LG	200	COM	STANDART	POW. OFF	+	+	?
63	LG 510 <sup>2</sup>	FOR LG	510	COM	STANDART	POW. OFF	+	+	?
64	SH GX 10	FOR SHARP	GX1/GX10	COM	STANDART	POW. OFF	+	+	+
65	SAM 2200	FOR SAMSUNG	SGH600/2100/2400/N100	COM	STANDART	POW. ON	+		
66	SAM 600	FOR SAMSUNG	SGH2200	COM	STANDART	POW. ON <sup>5</sup>	+	?	
67	SAM A100	FOR SAMSUNG	A100	COM	STANDART	POW. ON <sup>5</sup>	+	?	
68	SAM A200	FOR SAMSUNG	A200	COM	STANDART	POW. ON <sup>5</sup>	+	?	
69	SAM A300	FOR SAMSUNG	A300/N400/R2XX/C100	COM	STANDART	POW. ON <sup>5</sup>	+	?	
70	SAM A300 FLASH <sup>2</sup>	FOR SAMSUNG	A300	COM	JIG ON	POW. ON <sup>5</sup>			+
71	SAM S100 <sup>2</sup>	FOR SAMSUNG	S100	COM	STANDART	POW. ON <sup>5</sup>	+	?	
72	SAM C100 <sup>2</sup>	FOR SAMSUNG	C100	COM	STANDART	POW. ON <sup>5</sup>	+	?	
73	SAM C100 MODEM <sup>2</sup>	FOR SAMSUNG	C100	COM	STANDART	POW. OFF	+		
74	SEDO	FOR SENDO	S200	COM	STANDART	POW. ON <sup>6</sup>	+	?	
75	USB TO IrDA <sup>2</sup>		ALL IrDA DEVICES	USB-A	-				+

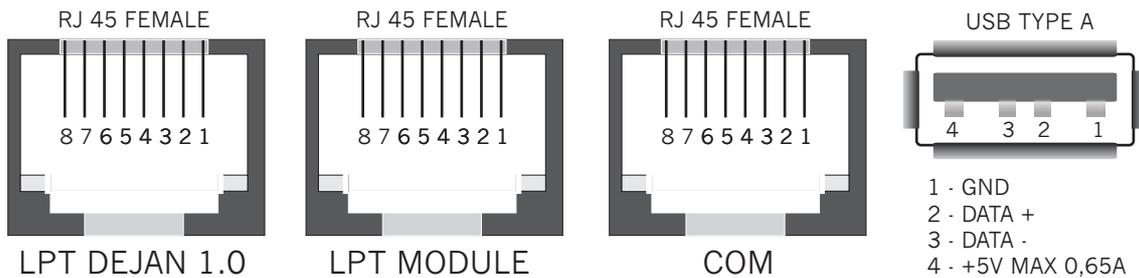
**Note:**

- 1: The cable is delivered in a package with TERMINATOR MODULE.
- 2: The cable will be delivered in additional payment.
- 3: The SWITCH OUT FLASH & LPT POWER supply gives TEST/FLASH voltage to the phone.
- 4: The SWITCH OUT FLASH & LPT POWER supply gives Power Supply to the DEJAN 1.0 / LPT MODULE.
- 5: The SWITCH OUT FLASH & LPT POWER supply gives Charging Voltage to the phone for flashing.
- 6: The SWITCH OUT FLASH & LPT POWER supply gives Power Supply voltage to the phone.

! THE INFORMATION IN COLUMNS UNLOCK / FLASH / LOGO-MELODY IS NOT COMPLETELY CHECKED.

# SIGNALS OF UNIVERSAL DEVELOPMENT INTERFACE

## UDI U3.0



### SIGNALS OF SLOT COM

RJ 45 PIN	MODE OF SLOT COM			
	SIGNALS OF M Bus MODE	SIGNALS OF F Bus MODE	SIGNALS OF STANDART M.	SIGNALS OF JIG MODE
1	GND	GND	GND	GND
2 <sup>(1)</sup>	SLOT-SWITCH 3/5V	SLOT-SWITCH 3/5V	SLOT-SWITCH 3/5V	SLOT-SWITCH 3/5V
3 <sup>(2)</sup>	M Bus	OUT DTR <sup>(4)</sup>	OUT DTR <sup>(4)</sup>	OUT DTR <sup>(4)</sup>
4 <sup>(2)</sup>	IN CTS/DSR	IN CTS/DSR	IN CTS/DSR	IN INVERTOR <sup>(5)</sup>
5 <sup>(2)</sup>	OUT RTS	OUT RTS	OUT RTS	OUT INVERTOR <sup>(5)</sup>
6 <sup>(2)</sup>	-	IN RXD	IN RXD	IN RXD
7 <sup>(2)</sup>	-	OUT TXD	OUT TXD	OUT TXD
8 <sup>(3)</sup>	OUT POWER	OUT POWER	OUT POWER	OUT POWER

#### Note:

##### 1: PIN 2 - SLOT-SWITCH 3/5V.

For deriving a logic level 3 volts in PIN 3/4/5/6/7, PIN 2 should be not connected, or is connected to PIN 1 - GND

For deriving a logic level 5 volts in PIN 3/4/5/6/7, PIN 2 should be connected to PIN 8 - OUT POWER, the switch OUT FLASH & LPT POWER should be switched ON.

##### 2: The pins 3,4,5,6,7 slots COM are protected by resistors 220 ohms and diodes to power supply and ground.

##### 3: PIN 8 - Switchable OUT POWER supply.

Is intended for flash of some models of phones, or power supply of additional devices, for example USI or UPI.

Level of OUTPUT POWER always 5 volts.

Output current 3-10 mA at power supply UDK from COM port.

Output current 0,65 A at power supply UDK from USB port.

OUTPUT POWER is protected by the polyswitch fuse 0,65A.

##### 4: The signal DTR is open collector pull-up resistor 1,5 kohms.

##### 5: IN INVERTOR / OUT INVERTOR.

Are intended for flash of some models of SAMSUNG phones. It is required special flash cable.

### SIGNALS OF SLOT DEJAN 1.0

RJ 45 PIN	SIGNALS
1	GND
2	-
3	M Bus
4	SLOT-SWITCH LPTMODE <sup>(1)</sup>
5	OUT B temp
6	IN F Bus RX
7	OUT F Bus TX
8	OUT V pp

### SIGNALS OF SLOT LPT MODULE

RJ 45 PIN	SIGNALS
1	RESERVED
2	RESERVED
3	RESERVED
4	RESERVED
5	RESERVED
6	RESERVED
7	RESERVED
8	RESERVED

#### Note:

##### 1: SLOT-SWITCH LPT MODE is intended for switching DEJAN 1.0 MODE / LPT MODULE MODE

For switching LPT in DEJAN MODE connect [PIN 4 SLOT-SW. LPT MODE] with [PIN 1 GND]

For switching LPT in MODULE MODE [PIN 4 SLOT-SW. LPT MODE] should be not connected.

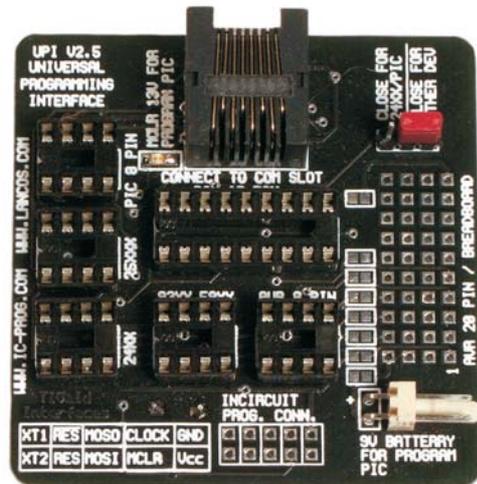
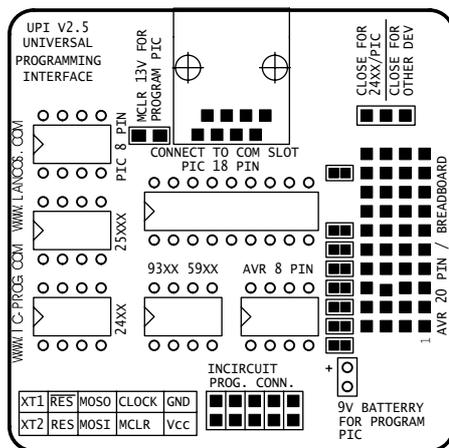
**For activation of the slot LPT DEJAN 1.0 and LPT MODULE the switch OUT FLASH & LPT POWER should be switched on and the USB power supply should be connected to UDI.**

# Universal Programming Interface - UPI v2.5

UPI it is possible to use for programming EEPROM I2C, SPI, MICROWIRE, MICROCHIP PIC and ATMEL AVR Controllers through UDI V2.X slot COM with special software IC-PROG or Pony Prog.

## FEATURES:

- Can programming I2C 24xx, SPI 25xxx, Microwire 93xx/59xx EEPROMs.
- Can programming PIC 8 pin and 18 pin.  
(It is necessary to connect the external battery 9v).
- Can programming PIC 28 and 40 pin only is IN-CIRCUIT or through an additional IC socket.  
(It is necessary to connect the external battery 9v).
- Can programming ATMEL AVR 8 pin.
- Can programming ATMEL AVR 20, 28, 32, 40, 44, 64 pin only is IN-CIRCUIT or through an additional IC socket..
- Led for see how going programming PIC controllers (MCLR 13V).
- Connector for IN-CIRCUIT programming.



## THE SOFTWARE FOR UPI V2.5

The program **IC PROG ver 1,05 beta** <http://www.ic-prog.com> allows to program the following chips:

**Microchip PIC:** PIC12C508, 508A, 509, 509A, 671,672, PIC12E518, 519, PIC12CE673, 674, PIC16C54, 56, 505, 61, 61A, 61B, 63, 63A, 64 A\*,65A\* 65B\*, 66, 67\*, 620, 621, 622, 622A, 627, 628, 71, 72, 72A, 73A, 73B, 74A\*, 74B\*, 76, 77\*, 433, 505\*, 711, 715, 765\*,923\*,924\*, PIC16CE625, PIC16C84,PIC16F83, 84, 84A, PIC16F870\*, 871\*, 872\*, 873\*, 874\*, 876\*, 877\*, PIC18F242\*, 248, 252\*, 258\*, 442\*, 448\*, 452\*, 458\*.

**Atmel AVR:** AT90S1200\*, 2313\*, 2323, 2333, 2343, 4414\*, 4433\*, 4434\*, 8515\*, 8535\*, AT89S53\*, 8252\*.

**EEPROM I2C:** 24C01, 24C02, 24C04, 24C08, 24C16, 24C32, 24C64, 24C128, 24C256, 24C512,

**EEPROM I2C Siemens:** SDA2516, SDA2526, SDA2546, SDA2586, SDA3506, SDA3516, SDA3526,

**EEPROM Microwire:** 93C06, 93C46, 93C56, 93C57, 93C66, 93C76, 93C86, 59C11, 59C13, 59C22,

(EEPROM: 93LC66, 76, 86, 25LCXX in version 1.05beta are not supported (Program bug))

**EEPROM SPI:** 25010, 25020, 25040, 25080, 25160, 25320,25640, 25128, 25256,

**EEPROM Siemens SD BUS:** SDA2506\*.

The program works under WINDOWS 95,98. For setup push the [F3] key "Hardware settings", select the interface JDM Programmer and number of a COM port, which you use. As it is necessary *Select Polarity of the Control lines:*

*Invert Data Out - OFF, Invert Data In - OFF, Invert Clock - OFF, Invert MCLR - OFF*

The program **PonyProg2000 ver 2.05a beta** <http://www.LancOS.com> allows to program the following chip:

**Microchip PIC:** PIC12C508, 508A, 509, 509A, 671, 672, PIC12E518, 519, PIC12CE673, 674

PIC16X83, PIC16X84, PIC16F84A, PIC16F870\*, 871\*, 872\*, 873\*, 874\*, 876\*, 877\*.

**Atmel AVR:** AT90S1200\*, 2313\*, 2323, 2333, 2343, 4414\*, 4433\*, 4434\*, 8515\*, 8534\*, 8535\*,

ATmega 8\*,16\*, 64\*,103\*, 128\*, 161\*, 163\*,323\*, 603\*, ATiny 12, 15, 22, AT89S53\*, 8252\*.

**EEPROM I2C:** 24C01, 24C02, 24C04, 24C08, 24C16, 24C32, 24C64, 24C65, 24C128, 24C256, 24C512,

24C325, 24C645, 24E16, AT17C65\*, AT17C128\*, AT17C256\*, AT17C512\*, AT17C010\*.

**EEPROM I2C Siemens:** SDE2526, SDA2546, SDA2586, SDA3546, SDA3586

**EEPROM SPI:** 25010, 25020, 25040, 25080, 25160, 25320, 2564X, 25128, 25256, 95640.

**EEPROM Microwire:** 9306, 9346, 9356, 9357, 9366, 9376, 9386.

**EEPROM Siemens SD BUS:** SDE2506\*.

**EEPROM:** S2430\*, X2444\*, X2445\*.

The program works under WINDOWS 95,98. For setup choice *Setup / Interface Setup*. Further it is necessary to select *SI Prog I/O* and number of a COM port, which you use. As it is necessary *Select Polarity of the Control lines:*

*Invert D-OUT - OFF, Invert D-IN - OFF, Invert SCKL - OFF, Invert RESET - OFF,*

*For program PIC: Invert D-OUT - ON.*

**Chips marked is familiar \* are programmed only in-circuit or through additional IC sockets**

# OPERATIONAL MANUAL OF UPI V2.5

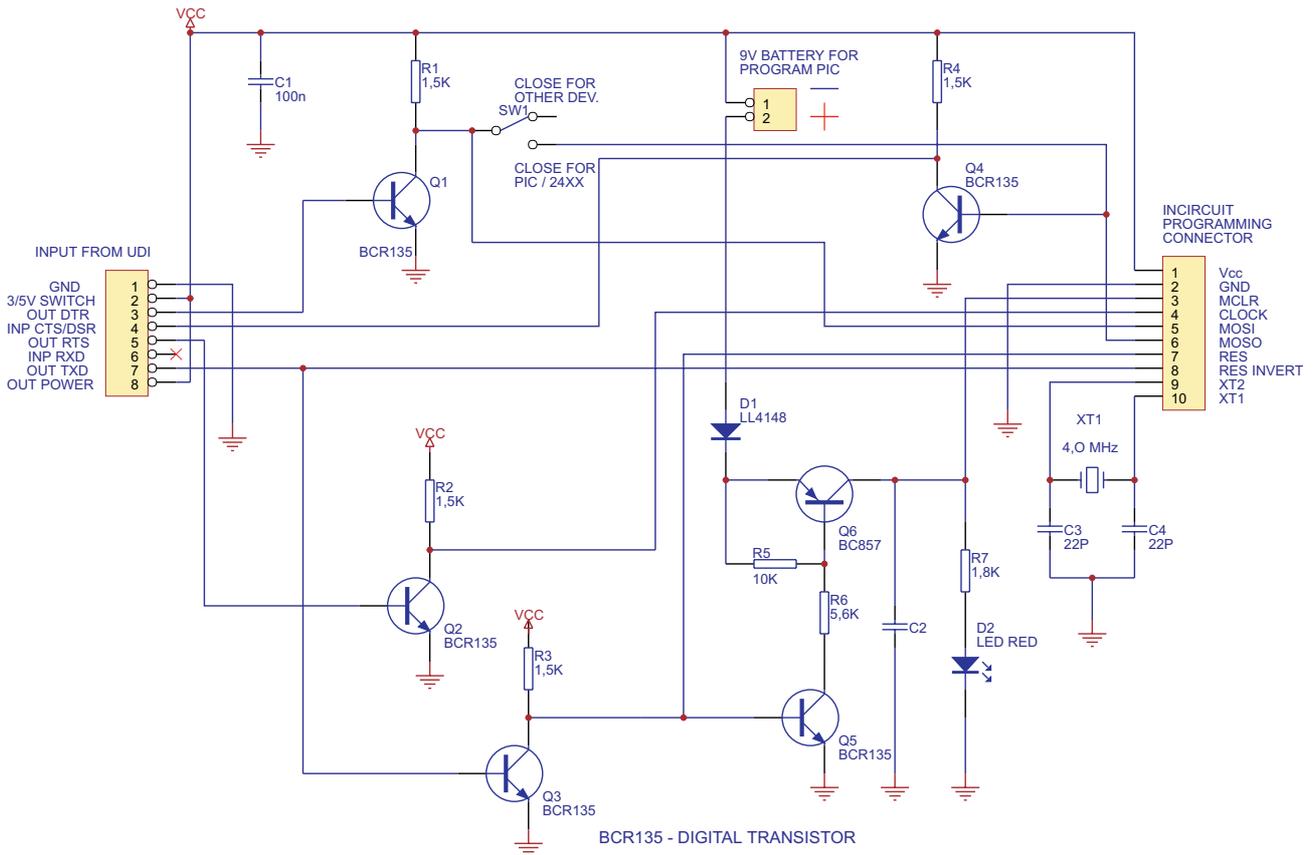
1. Connect UPI to a UDK in slot COM.
2. Connect a USB power supply in UDK.
3. In UDK enable the switch MODE OF COM SLOT in STANDART mode and also the SWITCH OUT FLASH & LPT POWER in mode ON.
4. In UPI establish a jumper 24XX / PIC - OTHER DEV.

For operations with PIC processor connect the external battery 9v.

Instead of the external battery it is possible to use a separate power supply, galvanic untied with a power supply of UDK

**To not use instead of the exterior battery, the power supply which is connected to UDK, It will destroy yours UDK and UPI !**

## THE CIRCUIT OF UPI V2.5



SIGNAL OF THE ICP CONNECTOR	SIGNAL OF THE AVR	DIP 8 AT 90	DIP 20 AT 90	DIP 28 AT 90	DIP 40 AT904434/8535	DIP 40 AT904414/8515	DIP 40 AT89S8252/S53
RES	RESET	-	-	-	-	-	9
RES INVERT	RESET INVERT	1	1	1	9	9	-
XT1	XTAL 1	2	4	9	12	18	18
XT2	XTAL 2	3	5	10	13	19	19
GND	GND	4	10	8	11	20	20
MOSI	MOSI	5	17	17	6	6	6
MOSO	MOSO	6	18	18	7	7	7
CLOCK	SCK	7	19	19	8	8	8
Vcc	Vcc	8	20	7	10	40	40

SIGNAL OF THE ICP CONNECTOR	SIGNAL OF THE PIC	DIP 8 PIC	DIP18 PIC	DIP28 PIC	DIP 40 PIC
Vcc	Vdd	1	14	20	11,32
GND	Vss	8	5	8,19	12,31
MOSI	RB7	7	13	28	40
CLOCK	RB6	6	12	27	39
MCLR	MCLR	4	4	1	1

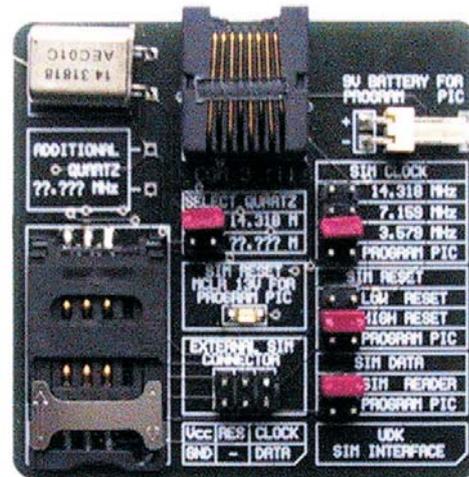
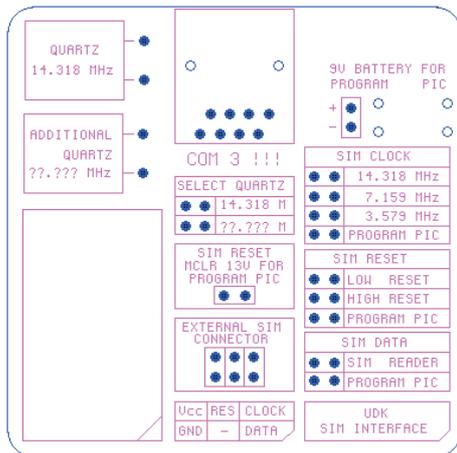
SIGNAL OF THE COM PORT	SIGNAL OF THE ICP CONNECTOR	SIGNAL OF THE SD(X)2506 (SD BUS)	DIP 8 SD(X)2506	SIGNAL OF THE 24XX (I2C)	DIP8 24XX	SIGNAL OF THE 93XX/59XX (SPI)	DIP8 93XX/59XX	SIGNAL OF THE 25XXX(MICROWIRE)	DIP8 25XXX
	Vcc	Vcc	3	Vcc	8	Vcc	8	Vcc	8
	Vcc	-	-	-	-	ORG	6	HOLD	7
	Vcc	-	-	-	-	RE	7	WP INV	3
OUT TXD	RES	-	-	-	-	CS	1	-	-
OUT TXD	RES INVERT	CE INVERT	2	-	-	-	-	CS INVERT	1
INPUT CTS	MOSO	D	4	SDA	5	DO	4	SO	2
OUT DTR	MOSI	D	4	SDA	5	DI	3	SI	5
OUT RTS	CLOCK	CLK	5	SCL	6	CLK	2	SCK	6
GND	GND	GND	1	GND	4	GND	5	GND	4
GND	GND	TP	7	A0	1	-	-	-	-
GND	GND	-	-	A1	2	-	-	-	-
GND	GND	-	-	A2	3	-	-	-	-
GND	GND	-	-	TEST	7	-	-	-	-

# Universal Sim Interface - USI V1.7

USI - additional interface to UDK intended for operation with GSM SIM CARDS, PRE-PAY PHONE CARDS, SAT-TV CARDS, Clone SIM Cards.

USI can work in two modes:

- SIM-READER** - mode intended for reading / writing GSM SIM CARDS, and writing EEPROM 24Cxx inside in a CLONE SIM CARDS (PHOENIX / SMART MOUSE compatible).
- PROGRAM PIC** - mode is intended for programming FLASH / EEPROM Memory in PIC processor inside in a CLONE SIM CARDS (JDM Programmer compatible).



## FEATURES:

- Compatibility with PHOENIX / SMART MOUSE / DEJAN SIM SCAN / JDM Programmer.
- Reading from GSM SIM CARDS IMSI, KI codes and write them in a clone SIM-CARD.
- Reading and writing Phonebook and some parameters GSM SIM CARDS.
- Possibility to program PIC processor inside in a CLONE SIM CARDS (JDM Mode).
- Possibility to use different frequencies 14.318 MHz, 7.159 MHz, 3.579 MHz at reading SIM CARDS.
- Possibility of installation of additional quartz on user frequency.
- LED indicating a condition SIM RESET, in a mode of programming PIC indicating presence of voltage 13V in on an input MCLR of the processor PIC.
- External SIM Connector.

## OPERATIONAL MANUAL:

1. Connect SIM READER to a UDK in slot COM.
2. Connect a USB power supply in UDK.
3. In UDK enable the switch MODE OF COM SLOT in STANDART mode and also the SWITCH OUT FLASH & LPT POWER in mode ON.
4. In USI establish a jumper *SELECT QUARTZ*, *SIM CLOCK*, *SIM RESET*, *SIM DATA*.

### For SIM READER mode:

- Set jumper *SIM CLOCK* in a place 14.318 MHz, 7.159 MHz or 3.579 MHz it is necessary for operation of the majority of the programs.
- Set jumper *SIM RESET* in a place LOW RESET or HIGH RESET it is necessary for operation of the majority of the programs.
- Set jumper *SIM DATA* in a place SIM READER.

### For PROGRAM PIC mode:

- Set jumper *SIM CLOCK* in a place PROGRAM PIC.
- Set jumper *SIM RESET* in a place PROGRAM PIC.
- Set jumper *SIM DATA* in a place PROGRAM PIC.

For operations with PIC processor connect the external battery 9v.

Instead of the external battery it is possible to use a separate power supply, galvanic untied with a power supply of UDK

**To not use instead of the exterior battery, the power supply which is connected to UDK, It will destroy yours UDK and USI !**

## THE SOFTWARE FOR SIM READER:

### For SIM READER Mode:

- **Sim Scan v2.01** by **Dejan Kaljevic** <http://users.net.yu/~dejan/>

SIM SCAN is a program that allows functionality analysis of Yours GSM SIM smart card.

With this program you can analyze: ATR, CLA+INS, FILES, Key.

Also, you can write IMSI and Ki to GSM a38 SIM Gold Card (PIC 16f84 & EEPROM 24c16)

Finding Ki works on 100% of new SIM cards from 2000-2002 with COMP128-1 ciphering algorithm.

Cardinal Software <http://www.mfgware.com/>

- **CARDinal 0.99.110F trial.** The software for editing smartcards (mainly SIM cards) with plug-ins system.

- **Cardinal beta (build 68).** The software for editing smartcards, finding IMSI and KI.

- **FKi2 v2.1.** The software for finding IMSI and KI.

- **WinPhoenix v1.06** <http://www.cellular-cables.com/download/winphoenix.zip>

The software for program EEPROM 24C16 inside in a CLONE SIM CARDS (Gold Card)

Operations of the program need a file *loader.hex* <http://www.cellular-cables.com/download/goldcard.zip>

### For PROGRAM PIC mode:

- **PonyProg2000 ver 2.05a beta** <http://www.LancOS.com> allows to program the PIC processor inside a clone card.

The program works under WINDOWS 95,98. For setup choice *Setup / Interface Setup*. Further it is necessary to select *SI Prog I/O* and number of a COM port, which you use. As it is necessary *Select Polarity of the Control lines: Invert D-OUT - ON, Invert D-IN - OFF, Invert SCKL - OFF, Invert RESET - OFF*.

### For SIM READER & PROGRAM PIC Mode:

- **IC PROG ver 1,05 beta** <http://www.ic-prog.com> allows to program the PIC processor inside a clone card, and external EEPROM 24C16 inside a clone card (Smartcard Wisard).

The program works under WINDOWS 95,98. For setup push the [F3] key "Hardware settings", select the interface JDM Programmer and number of a COM port, which you use. As it is necessary *Select Polarity of the Control lines: Invert Data Out - OFF, Invert Data In - OFF, Invert Clock - OFF, Invert MCLR - OFF*.

For SIM READER mode setup choice *Settings / Option / Smartcard*. Further it is necessary to select Frequency 3.58 MHz, type of PIC Prcessor and number of a COM port, which you use.

- **CHIP-CAT v2.3** <http://www.multisat.de/software/chipcat23.zip>

Allows to program the PIC processor and external EEPROM 24C16 inside a clone card.

In setup choice CLOCK 3.5 MHz and number of a COM port, which you use.

- **JGPROG-PAP by Jg2000** <http://www.jg2000.org> [http://www.vgj.pl/pliki/jgprog\\_27\\_12\\_2002.zip](http://www.vgj.pl/pliki/jgprog_27_12_2002.zip)

Allows to program the PIC processor and external EEPROM 24Cxx inside a clone card.

In setup choice AutoMode JGPAP2 **OFF** and number of a COM port, which you use.

## CLONE SIM CARD:

You will need to know IMSI and Ki codes of every simcard that you want to make backup. IMSI and Ki codes are the codes that identify a simcard at your network provider, this codes are encrypted at your original simcard

SIM EMU <http://simemu.cjb.net/>

Clone card are of the following types:

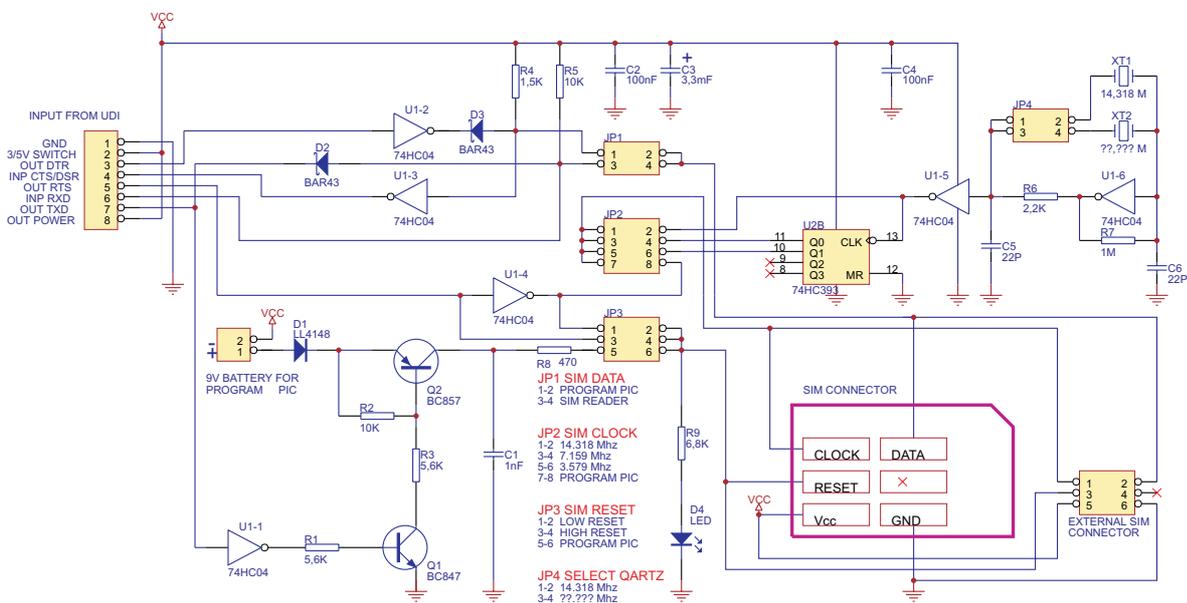
GOLD CARD - (PIC16F84+24C16) max. 4 different provider names, 31 phonebook names, 1 SMS

SILVER CARD - (PIC16F876+24C64) max. 8 different provider names, 208 phonebook names, 10 SMS

GREEN CARD - (PIC16F876+24C128) max. 8 different provider names, 250 phonebook names, 40 SMS

BLACK CARD - (PIC16F876+24C256) max. 8 different provider names, 250 phonebook names, 40 SMS

## THE CIRCUIT OF UPI V1.7



# Terminator Dongle Module - TDM v1.0

TDM is an additional module installed in UDI.

This product is very popular with unlockers and can carry out a range of options on most SonyEricsson handsets.

## FEATURES:

- Work with Ericsson, SonyEricsson phones.
- Work with programs SonyEricsson Terminator 1.8, SonyEricsson Cooler DIV 8.4 and DIV USB 2.3.
- Includes connection cable to Ericsson phone.

## OPERATIONAL MANUAL:

1. Install TDM to UDI inside.
2. Set your parallel port to ECP or EPP mode.
3. Connect the LPT port in UDI (Do not use a too long cable!).
4. Connect the USB power supply in UDI.
5. Connect the special TDM cable in the slot LPT MODULE.
6. In UDK enable the switch MODE OF COM SLOT in STANDART mode and also the SWITCH OUT FLASH & LPT POWER in mode ON.
7. Start the program DIV or other.



**Use always FULL CHARGED battery during all operations.**

**Do Not Use Program SonyEricsson Terminator Ver. 2.0 IT WILL KILL PHONES!**

### **Here are some features of new DIV USB:**

- The ONLY software who can read unlock codes on new models T230, T630, Z600, P900 direct unlock function for all new models (Z200, T230, T630, Z600, P900).
- Very easy installation and usage (not need setup virtual ports buffer, enables in registry, ...).
- Support flashing of T100/T105 R8D and up.
- Support flashing Asian/Chinese for T610 R3C and up.
- FAST flashing of most SE models and versions.
- FAST method for enter boot on T230 (more faster than SE-Fighter).
- FAST and easy unlock (just one button click) for all new models/version.
- Unlocking time for new models is 20-30 seconds (2-3 minutes with SE-Fighter to unlock).
- Very easy to use. (not need setup virtual ports buffer, enables in registry, ...).
- Works on LPT Terminator dongle!
- MAC-OS style software interface.
- Direct special function for repair phones.
- Special factory TEST Flash files available for latest models.

### **DIV v8.4 can:**

- Provide full support for unlocking new T610 version R1L and up.
- Fix NO ACCESS problem on repaired phones.
- Repair totally erased (damaged) GDFS on T68, T200, T300, T310, P800, T610.
- Possibility to write full GDFS files like AVR flash files (no more ERROR 4017).
- Possibility to write full AVR flash (include GDFS part area too).
- Can repair any T68, T200, T300, T310, P800, T610 with software damages (even if Flash IC or CPU was changed or totally erased).
- Recalculate all CRC (checksums) after flashing GDFS part area, include SCRC (NO ACCESS problems), DCRC1, DCRC2 (4 locks closed problems) on T68, T200, T300, T310, P800, T610.

### **Here are some of the features of DIV8.4 software:**

#### *FLASH:*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc, T65s, T39m, T39mc, R520m, R520mc, T100, T102, A3618s, A3618sc, R600s, R600sc

#### *READ CODES:*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc, T65s, T39m, T39mc, R520m, R520mc, T100, T102, A3618s, A3618sc, R600s, R600sc, Z600 (select T610 & rebuild SP from OTP area).

#### *DIRECT UNLOCK:*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc, T65s, T39m, T39mc, R520m, R520mc

#### *LOCK TO NETWORK (2 and 3 digits MNC):*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc, T65s, T39m, T39mc, R520m, R520mc

#### *EMPTY BOARD FLASHING:*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc, T65s, T39m, T39mc, R520m, R520mc (also reflash already flashed empty phones without closing 4 locks)

#### *MAKE GDFS BACKUP:*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc, T65s, T39m, T39mc, R520m, R520mc

#### *REPAIR 4 LOCKS CLOSED BY OTHER SOFTWARES:*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc, T65s, T39m, T39mc, R520m, R520mc

#### *REPAIR TOTALLY DAMAGED GDFS (4 locks closed):*

T610 (all versions), P800, P802, T310, T310c, T300, T302, T200, T202, T68i, T68ie, T68m, T68mc

**NOTICE:**

Changing Phone Firmware, Removing SP lock and Changing IMEI may be illegal in your country!!!

Please check your countries laws before you use these functions!!!

TiVald Interfaces never allows any product to be used for illegal purposes!!!

If you use any product provided by TiVald Interfaces for illegal purposes, you will be held responsible for any legal actions taken!!

We will not be responsible!!!

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