



InduSoft PAC

WinCon-8xx9 Embedded Controller with InduSoft

- ❑ Leading age embedded platform with Intel Strong ARM CPU running Windows CE .net operating system.
- ❑ Support InduSoft Web Studio
- ❑ Support DCON/Modbus/OPC/DDE/TCP/IP protocol
- ❑ Support dual LAN to provide higher network performance, network security, and redundancy capability (WinCon-8x4x only)



ICP DAS CO., LTD.
<http://www.icpdas.com>

InduSoft PAC

W-8xx9 Embedded Controller with InduSoft



W-8x39

W-8x49



W-8xx9 Series

WinCon-8000 Standard Embedded Controller with InduSoft

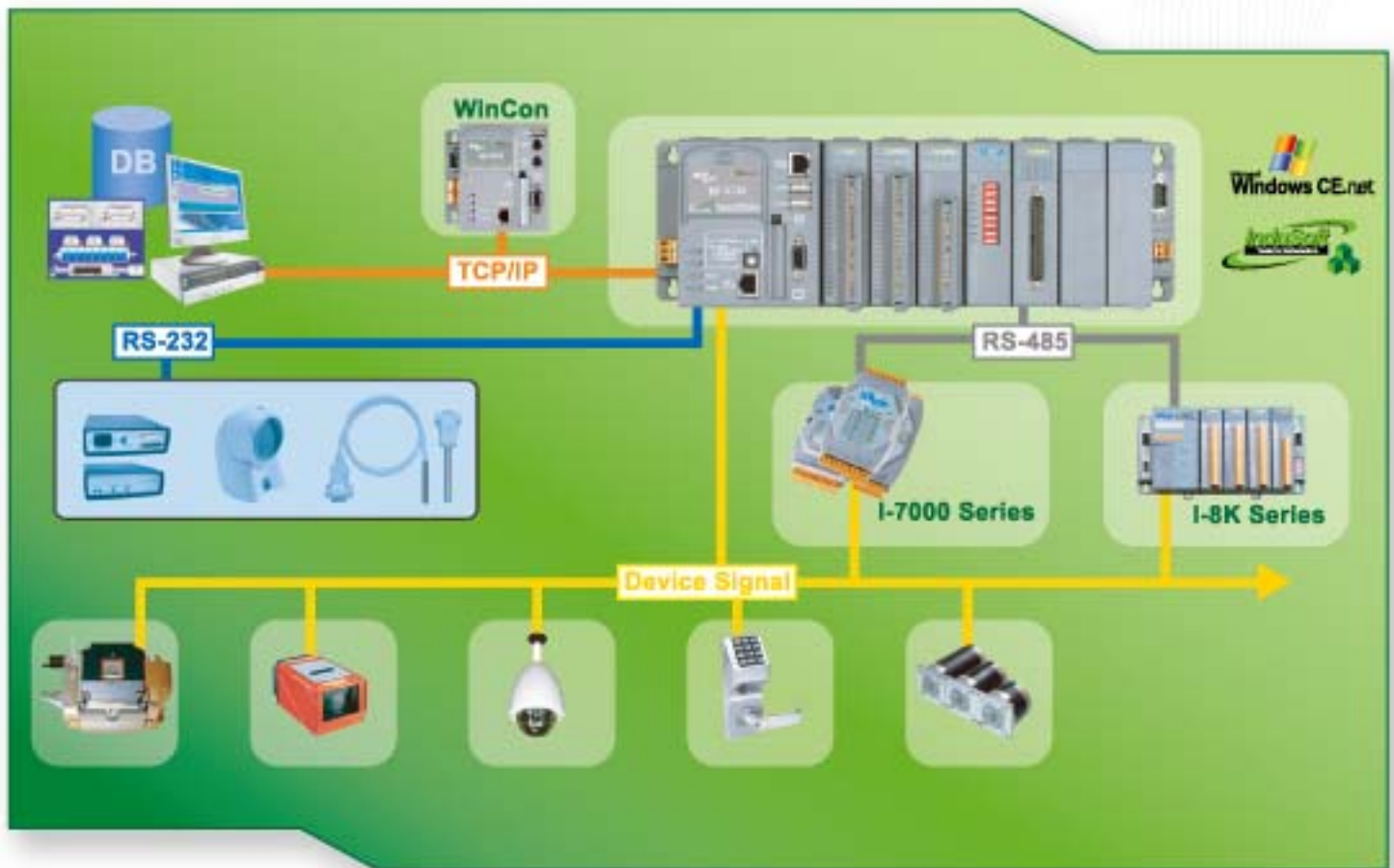
ICP DAS Wincon-8039/8339/8749/8049/8339/8749 are Windows CE based Programmable Automation Controller. It features with the powerful InduSoft Web Studio and supports popular and flexible programming software - Microsoft EVC++ 4.0 and VS.NET 2003 (VB.NET & C#.NET)

InduSoft Web Studio is the most powerful, integrated collection of e-automation development tool that includes all the building blocks needed to develop Human Machine Interfaces (HMI) and Supervisory Control and Data Acquisition (SCADA) systems. Now we have integrated the SCADA - InduSoft into the WinCE embedded controller - WinCon-8000 which is a leading edge embedded platform of ICP DAS with an Intel Strong ARM CPU running with Windows CE.NET and supports SCADA technology of data acquisition and remote control. The W-8xx9 Series can play as an intelligent distributed data acquisition front end connected to a host machine running a standard SCADA package. In addition, W-8xx9 InduSoft embedded controller also allows you to save your application screens in HTML format and export them from W-8xx9 http server to IE Browsers. Via the combination of Indusoft and W-8xx9 users can develop own HMI and web control easily and quickly.

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□ W-8xx9 Embedded Controller with InduSoft



Soft PAC

InduSoft PAC

About WinCon

The WinCon-8000 is a leading edge embedded platform of ICP DAS running with Windows CE .NET operating system and its advantages includes hard real-time capability, small core size, fast boot speed, interrupt handling, achievable deterministic control and low cost. Using WindowsfnCE .NET in the WinCon-8000 gives it the ability to run PC-based Control software such as Visual Basic .NET, Visual C#, Embedded Visual C++, SCADA software, Soft PLC....etc.



□ Features

Support IPC Capabilities

- Intel Strong ARM CPU, clock frequency: 206Mhz
- Supports VGA , Ethernet, USB, Keyboard, Mouse, Compact Flash

Built-in Ethernet connectivity

- Ethernet port to support the TCP/IP, Web-Server & FTP Server.
- Industrial Modbus/TCP, UDP Protocol Compliant

HMI/ SCADA automation technology

- WinCon-8000 integrat It can play as an intelligent distributed data acquisition front end connected to a Host machine running a standard HMI/SCADA packages.

Universal fieldbus supported

- CAN bus network supported

Built-in and expansion serial ports

- Built-in RS-232/485 ports that support various serial devices such as GPRS modem or touch screen.

Advanced programming environment

- It is easy to use Microsoft Embedded Visual C++, Visual Basic .NET or Visual C# to develop your application programs with bonus software WinCon SDK, WinCon Utility and WinConOPC Sever.

PLC-style and expandable I/O

- Direct backplane access to I/O and wide range of I/O modules supported - I-8000, I-87K expansion I/O modules: DI, DO, AI, AO, Counter/Frequency, Motion control...etc.

Common Features of W-8xx9 series

Processor	Compatible with Intel Strong ARM CPU, 206MHz
Operating System	Windows CE.NET 4.1
Pre-load Software	InduSoft Software for WinCon-8xx9 Series
SDRAM	64M bytes
Flash	32M bytes
EEPROM	16K bytes
Watchdog timer	Yes
Real Time Clock	Gives hour, minute, sec, date of week, date of month, moth &
Expansion Slot	1 x Compact Flash Type II insert with ejector
VGA Port	1 VGA port: resolution: 320x240x16 to 1024x768x16
PS/2 Port	W-8x39:2 PS/2 ports: Keyboard & Mouse, W-8x49: None
Ethernet Port	W-8x39:1x RJ45, 10BaseT, W-8x49:2 x 10/100 BaseT
USB Port	W-8x39:1 USB 1.1 port, W-8x49:2 USB 1.1 ports
COM1	Internal use for I-87K Serial IO boards. W-80x9 has no COM1
COM2	RS232: full modem signals, Speed: 1152000bps max.
COM3	RS485, Speed: 1152000 bps max. D+, D-
Reset Button & LED	1 reset button & 1 power LED
Unique Serial Number	64-bit hardware unique serial number
I/O Expansion Slot	W-8039/W-8049:0, W-8339/W-8349:3, W-8739/W-8749:7
Operating Temp	-25°C ~ 75°C
Storage Temp	-30°C ~ 85°C
Humidity	5~95%
Power Supply	20W, Unregulated +10Vdc to +30Vdc
Dimensions (LxHxD)mm	W-8039/W-8049:114x110x90, W-8339/W-8349:229x110x90, W-8739/ W-8749:354x110x90

About InduSoft Web Studio

InduSoft Web Studio (IWS) is the most powerful collection of e-automation development tool offering Web and wireless integration to develop Web-based HMI/SCADA applications. It can eliminates unnecessary and repetitive development and streamlines application development. W-8xx9 series provide the InduSoft DCON Bundled Driver to integrate InduSoft SCADA system and ICPDAS products (WinCon-8000, I-7000, I-8000 and I-87K).

Shortcut Toolbar
Develop and manage applications more efficiently.

Execution Toolbar
Execute/stop local and remote applications without leaving the development environment

Graphical Toolbar
Simple point-and-click graphic design in the object-oriented screen editor

Screen Worksheet
Quickly and easily design complex application using cut-and paste , drag-and-drop visual layout tools.

LogWin Window
View execution logs , visually trace program topics , or search references for any particular tag.

Workspace
Navigate between modules and screens and improves your ability to reuse work.

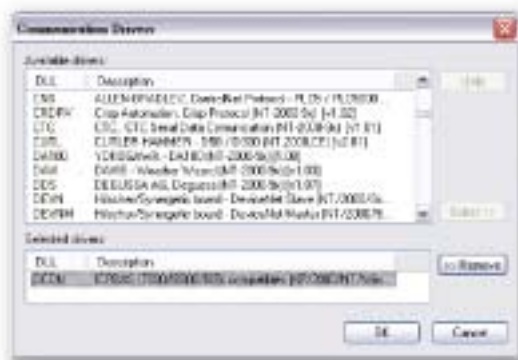
Database Spy Windows
Easily read and debug tasks , expressions , functions . and checkpoints.

Tag	Type	Quality	Comments
HA_P01	001	0000	Yes
HA_P02	001	0000	Yes

InduSoft Web Studio Features

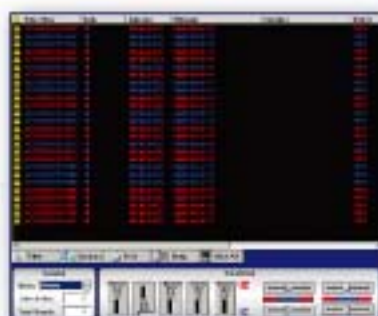
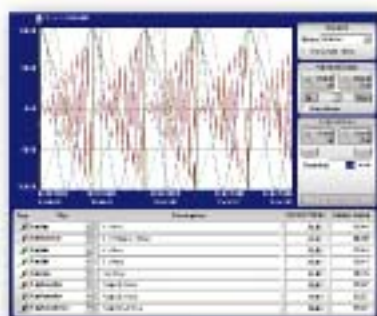
□ Communication Protocol

- **DCON** Protocol for ICP DAS embedded controller
- **Modbus / OPC / DDE / TCP/IP** Client and Server Communication Support
- Support more than 200 PLC **Communication Drivers** such as Siemens, Omron so forth.



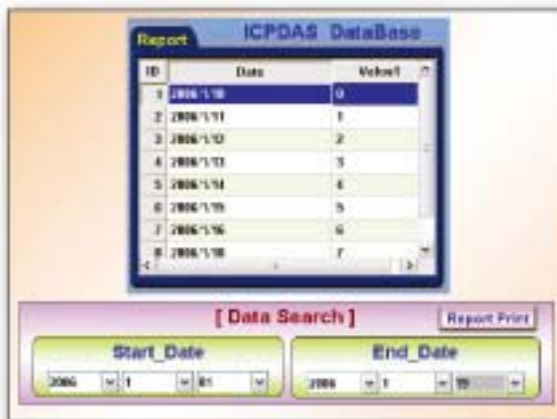
□ Graphics / Alarms / Trending / Events

- Create interfaces by using drag and drop
- Provide more than 40 real-time dynamic and graphic screens
- Provide an object-oriented environment and symbol library to simplify application and object re-usability
- Embedded sophisticated alarm system send alarms to screens, file, printer, database, browser or E-mail
- Allow users to filter alarms / trending by categories at runtimes
- Keep track of process behavior through on-line or historical trending
- Provide Event Record Function to record when setting events happened



□ Recipes / Reports / ODBC

- By Recipe, users can record the setting parameters and initializes them when the project start-up
- Provide TXT / RTF format reports and file data can also be showed in the screen by date period
- Provide ODBC to record data in Excel / Access / SQL / Oracle etc. Database



□ Math / Scheduler

- Provide Math Forms to do transform, calculate, loop, procedure, condition judgement etc. so users can complete any function like Short Message Service (SMS)
- Provide periodical trigger function like timer by using Scheduler Forms.



□ Input / Output / Wireless

- Integrated with ICPDAS Controller & I/O modules and users can complete whole supervisory control system easily and quickly.
- Support more than 200 PLC **Communication Drivers** such as Siemens, Omron so forth.
- Provide remote supervisory control to exchange data between wireless and mobile devices like PDA via Web Browser.



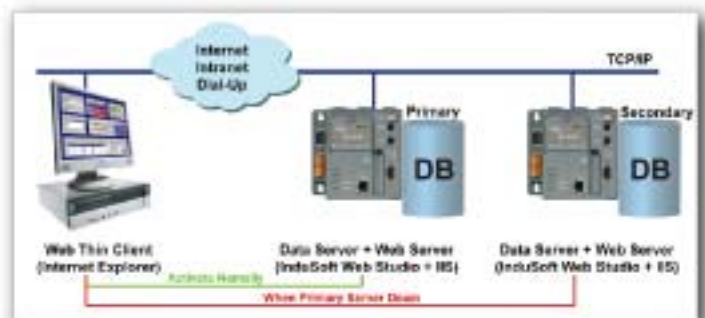
□ Security / Translation / VBScript

- Provide security system / firewall for applications:
 1. 0~255 security level
 2. IP Locked function
 3. Account / Password function
- Conform to industry standards such as Microsoft .NET, OPC, DDE, ODBC, XML, SOAP, and ActiveX.
- Provide automatic language translation at run-time.
- Provide embedded VBScript interface and it can also run under WinCE and Web Client stations.



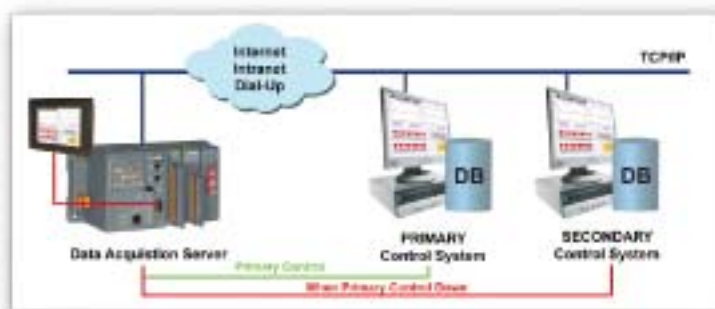
Web Solution

- Multiplatform Servers and Web Thin Clients (WinNT/2K/XP and WinCE).
- High-performance data communication (send/receive data by events or change of values).
- Uses a regular WEB Browser (Internet Explorer) to host the application.
- Does Not require the installation to the runtime software nor the application, remaining THIN as far as software installation is concerned.
- Requests online and history data from the Server where InduSoft Web Studio is running, becoming a CLIENT for the data.



Redundancy System

InduSoft built in redundancy function include data server, web server and IWS web gateway for users, so users can always set up a redundancy system fast and easy when develop systems in InduSoft.



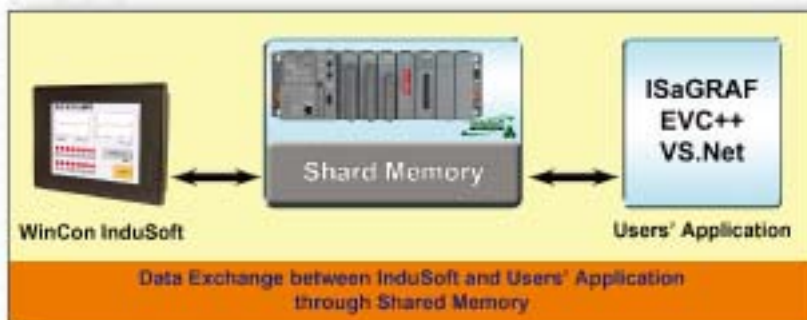
Database Solution

- Support for third-party SQL Relational Databases such as SQL Server, MS Access, Oracle, Sybase and others, via standard ADO.NET Providers.
- Embedded ADO.NET interface for all history tasks (Alarms, Events and Trends) as well as for the native Grid object.
- Database connectivity from any platform supported by IWS or CEView (including Windows CE and Pocket PC), through the unique Studio Database Gateway, which provides connection to the database through a standard TCP/IP link.
- Support for Secondary Database in the modes "Redundancy" or "Store and Forward" increasing the reliability of the system and avoiding loss of data.



Data Exchange with Users' Application

Although W-8xx9 series are highly integrated, it can be further to expanded with users' Applications (EVC++, VB.NET, C#), allowing W-8xx9 series to more flexible and powerful. With both InduSoft and user's specific application integrated in a system, the W-8xx9 series are optimized for performance and deliver the best reliability to the system.



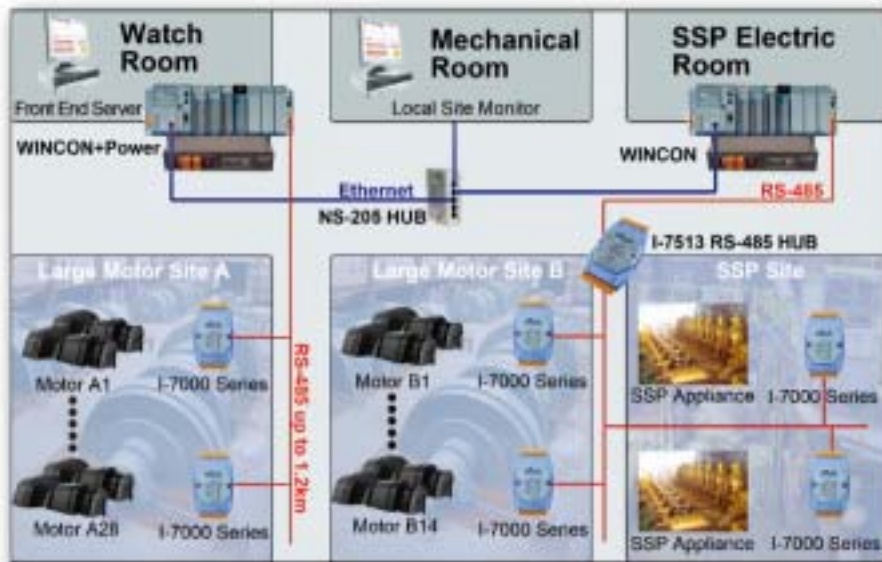
Wastewater Treatment System

- Use standard Modbus RTU as communication interface, via Indusoft HMI.
- Easy use (GUI) implemented on all local touch screen based systems.
- E-Stop capabilities upon alarm trigger.
- System is fully controllable/accessible from local work stations or from remote locations.
- Robust control capabilities offered by ISaGRAF development suite, allows user to create a total control solution for further system updates.



Iron Industrial Safety System

- Use standard DCON Driver as communication interface, via Indusoft HMI.
- Monitor or Control the system status through IE Browser at any location.
- Record system status through ODBC database server.
- Design for easy wiring on wide and broad monitor site.
- Monitor the site lively through web camera while adding Active X into InduSoft.



Applications Field

- Factory & Machine Automation
- Environment & Facility Monitoring Industrial
- Control/Automation Building
- Automation Remote
- Data Acquisition



Specification of W-8xx9 series

WinCon-8xx9 Series	W-8x39 Series			W-8x49 Series		
	W-8039	W-8339	W-8739	W-8049	W-8349	W-8749
Processor	Compatible with Intel Strong ARM CPU, 206MHz					
Operating System	Windows CE.NET 4.1					
Pre-load Software	InduSoft Software for WinCon-8xx9 Series					
SDRAM	64M bytes					
Flash	32M bytes					
EEPROM	16K bytes					
Watchdog timer	Yes					
Real Time Clock	Gives hour, minute, sec, date of week, date of month, moth &					
Expansion Slot	1 x Compact Flash Type II insert with ejector					
VGA Port	1 VGA port: resolution: 320x240x16 to 1024x768x16					
PS/2 Port	2 PS/2 ports: Keyboard & Mouse			None		
Ethernet Port	1x RJ45, 10BaseT			2 x 10/100 BaseT		
USB Port	1 USB 1.1 port			2 USB 1.1 ports		
COM1	Internal use for I-87K Serial IO boards. W-80x9 has no COM1					
COM2	RS232: full modem signals. Speed: 1152000bps max.					
COM3	RS485, Speed: 1152000 bps max. D+, D-					
Reset Button & LED	1 reset button & 1 power LED					
Unique Serial Number	64-bit hardware unique serial number					
I/O Expansion Slot	0	3	7	0	3	7
Operating Temp	-25°C ~ 75°C					
Storage Temp	-30 C ~ 85°C					
Humidity	5~95%					
Power Supply	20W, Unregulated +10Vdc to +30Vdc					
Dimensions (LxHxD)mm	114x110x9	229x110x9	354x110x9	114x110x9	229x110x9	354x110x9

Ordering Information

□ WinCon

W-8039	0-slot InduSoft Embedded Controller (InduSoft 300Tags Target license)
W-8339	3-slot InduSoft Embedded Controller (InduSoft 300Tags Target license)
W-8379	7-slot InduSoft Embedded Controller (InduSoft 300Tags Target license)
W-8049	0-slot InduSoft Embedded Controller with dual Ethernet ports (InduSoft 300Tags Target license)
W-8349	3-slot InduSoft Embedded Controller with dual Ethernet ports (InduSoft 300Tags Target license)
W-8749	7-slot InduSoft Embedded Controller with dual Ethernet ports (InduSoft 300Tags Target license)

DEVELOPMENT LICENSE with Run-Time License and One Web Client End :

InduSoft-NT512000D	Advanced Server (512,000Tags, unlimited drivers)
InduSoft-NT64000D	Control Room (64,000Tags, 8drivers)
InduSoft-NT4000D	Operator Workstation (4,000Tags, 5drivers)
InduSoft-NT1500D	Local Interface for Windows NT/2000/XP (1500Tags, 3drivers)
InduSoft-NT300D	NTView PRO for Windows NT/2000/XP (300Tags, 1 drivers)

Only RUN-TIME LICENSE with One Web Client End :

InduSoft-NT512000R	Advanced Server Run-time (512,000Tags, unlimited drivers)
InduSoft-NT64000R	Control Room Run-time (64,000Tags, 8drivers)
InduSoft-NT4000R	Operator Workstation Run-time (4,000Tags, 5drivers)
InduSoft-NT1500R	Local Interface for Windows NT/2000/XP Run-time (1500Tags, 3drivers)
InduSoft-CE1500R	CEView standard for Windows CE Run-time (CE View)(1500Tags, 3drivers)
InduSoft-NT300R	NTView PRO for Windows NT/2000/XP Run-time (300Tags, 1 drivers)
InduSoft-CE300R	CEView Lite Plus for Windows CE Run-time (300Tags, 1 drivers)
InduSoft-NT150R	Lite Interface for Windows NT/2000/XP Run-time (150Tags, 1 drivers)
InduSoft-CE150R	CEView Lite for Windows CE Run-time (150Tags, 1 drivers)

Additional Number of Web Client End :

InduSoft-NT	1 (default), 2, 4, 8, 16, 32, 64, 128, 256
InduSoft-CE	1 (default), 2, 4, 8

Microsoft
Windows CE.net

InduSoft PAC

InduSoft

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