- Industry Proven
- Best Selling Starter Kit Ever
- ♦ Simple ICE
- Application Builder
- ◆ IAR Assembler
- Classic Hardware
- ◆ ISP

#### Contents:

- ◆ Target board
- In-System
- Programmer
- Software & manual on CD
- ◆ AVR device sample

#### Compatible with:

- ◆ Win 3.1/95/98/ME
- ◆ Win 2000/NT4

#### **Device Support:**

- ♦ AT90S1200
- AT90S2343
- ◆ AT90S2313
- ♦ AT90S4414
- ♦ AT90S2323
- ♦ AT90S4434
- ♦ AT90S8515
- ♦ AT90S8535
- ♦ AT90S2333
- AT90S4433
- ◆ ATtiny12
- ◆ ATtiny15
- ◆ ATtiny22
- ◆ ATmega8 (W)
- ATmega16 (W)
   ATmega32 (W)
- ◆ ATmega103 (I)
- ◆ ATmega603 (I)
- ◆ ATmega128 (I,W)
- ◆ ATmega128 (I,W) ◆ ATmega323 (W)
- ◆ ATmega161 (W)
- AT megalol (W)
- ◆ ATmega163 (W)

I) = ISP Only - Not supported by board hardware.

W) = Not supported on Windows 3.1.

Note: Some devices may require a programming adaptor.

Order Code:



# **STK200**+

### A complete development system for AVR microcontrollers

#### The best starter kit ever



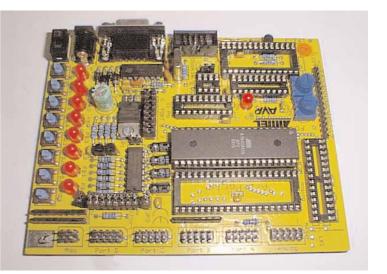
The STK200 supplied by Kanda to Atmel was the most successful starter kit EVER produced, with over 30,000 sold worldwide. Its success was due to Kanda's design concept that it should support as many features as possible but remain really easy to use, coupled with our excellent quality control and reliability in manufacture. We are pleased to be able to tell you that an enhanced version is now available direct from us.

#### STK200 Plus

If the STK200 was good, the STK200+ is better. Not only do you get all the benefits of the original, you also get a development environment to help produce your application whilst retaining the easy to use philosophy. And you won't believe the price.

#### STK200 board

You need hardware that supports all your needs but does not take weeks to understand. The classic target board is effectively laid out to give you access to all the peripherals of the different AVR devices including ADC and UART. It has support circuitry for RS232, adjustable reference voltage for ADC, plus LCD interface complete with contrast adjustment, and RAM expansion support. Each AVR device type has its own socket to reduce the



amount of jumpers you have to move, and 3.3V/5V operation and brownout circuitry are supported. Finally, all port pins are brought out to separate pin headers for easy expansion and signal monitoring.

## Kanda com

AVM0027

#### ISP

The system uses a parallel port programmer with 10-way ribbon cable using Kanda standard connection as adopted by Atmel and the ISP software is now an industry standard. The emulation included in the package uses the same hardware so you do not have to worry about cable changes. The ISP is project based to help with file storage and version control.

#### Application Builder

Built-in to the development environment, the Application Builder uses simple wizards to create all your setup code including ports, timers, UART, ADC, SPI, watchdog and interrupts. Stack pointer, External SRAM access and other device features can also be set. This powerful feature gives you instant source code templates and code examples. It also reduces the need to read all the datasheets before you start your development, saving you time and money.

Application Builder	_ 🗆 ×
Device = AT90S8515  WDT Enable Watchdog Period 2048 Cycles	Peripherals Timer 0 Timer 1 Interrupts UART/SPI
☐ Enable EXT SRAM Access ☐ SRAM Wait State Use Mouse or Space, TAB or Arrow Keys	Timer 2 A to D Port A Port B Port C Port D
<ol> <li>Output Type is Assembler</li> <li>Select Required Peripherals</li> <li>Click Next Button -</li> <li>Defaults Back</li> </ol>	Stack Pointer 025F - <u>N</u> ext <u>C</u> ancel

#### Assembler

The IAR assembler/linker is called with a single keypress and all features of this powerful package are supported using a comprehensive dialog box. Memory models, listing and output file types can be amended.

#### Emulation

Simple emulation helps you get your project right, so we have included a debug package using the same hardware as the ISP. Although this simple ICE has limitations when compared to real (expensive) ICE it will help you debug your application and includes Step and Run to Breakpoint functions and register views.

To make your life easier, we have included comprehensive help files, sample programs and a manual on the CD.

Register Address	Register Name	Register Value	
DARK .	SRED	în stat	
0x3E	SPH	0x02	
0x3D	SPL	0x5F	
0x3B	GIMSK	0x00	
0x3A	GIFR	0x00	
0x39	TIMSK	0×00	
0x38	TIFR	0×08	
0x35	MCUCR	0x00	
0x33	TCCR0	0x00	
0x32	TCNT0	0x00	
0x2F	TCCR1A	0x00	
0x2E	TCCR1B	0x00	
<u>0x2D</u> \ Registers <u>} 1</u> 0 Regist	TCNT1H	0x00	

