

*PC-Based Logic Analyzer*

**With Zeroplus Logic Analyzer**

**ZEROPLUS**  
— The leader of Logic Analyzer —

you can get **6** advantages  
to surpass your competitors.

- Come into the market in advance.
- Speed up the developing schedule.
- Reduce the time of checking and debugging.
- Improve the quality of product design.
- Control the operation cost efficiently.
- Improve the manufacturing yield.



Zeroplus Technology Co., Ltd. was founded in 1997 by a group of engineers with many years design experience in area of MCU programming. Zeroplus sophisticates in wireless controllers that are compatible with the full range of TV game consoles' peripheral device, the company possesses the core technology in IC design. Our competitive advantages are not only does have insight into the industry, our "Know How" also makes good relationship with partners. Our mission is to organize the markets' information and use it to bring forth products that fulfill customers' requirements.

Zeroplus announces it is engaged in the electronic measuring instruments in 2004. Applying the advanced MCU technology to instruments, we successfully developed the latest patented measuring instrument: PC-based logic analyzer. Unique and innovative technology was accredited by a number of patents, applying regions or countries include China, Japan, Canada, Taiwan, India, France, America, England, Singapore, Italy, Germany, and Korea. Of the 37 applications, 36 belong to PI and 1 are UM. The number has been grown. Since the launch of PC-based logic analyzer in 2005, it has been widely adapted by many technological manufacturers in the IC industry and educational institutions for digital analysis. The excellent sale has made the logical analyzer become the most popular in the market.

**Innovative Vision/ Premium Brands -- honour of Taiwan Excellence Awards.**

Zeroplus Logic Analyzer, designed by Zeroplus Technology itself, has won the Taiwan Excellence Awards in 2006 and 2009; which proves that technology research, quality management, marketing and other aspects of Zeroplus Technology have reached the international standard, and also showed that Zeroplus is well praised by customers and the core value of Innovative Vision/ Premium Brands.

**One Zeroplus Logic Analyzer for one engineer.**

"Professional Measurement/High Quality" is the core ideal of Zeroplus Technology, which insists on controlling the design process strictly for providing excellent quality. Using Zeroplus Logic Analyzer can reduce the development time, save the development cost and improve the design quality. It is the best assistant tool for electronic researchers, electronic testers, students in electronic major or individual studio, also the best teaching material for electronic educational institutions.

**Green Product · Quality First**

All products of Zeroplus Technology have passed every Safety Certificate, FCC&CE Certificate, test of EMI, EMC, ESD of BSMI, Environmental Impact Assessment of Electronics Testing Center, high temperature & humidity test [-40°C~+80°C; 95%RH, 70°C], drop test, 200MHz sampling frequency Checking Certificate, RoHS and WEEE Certificate.

**Patent Certification**



US  
Pat. 7,392,434 B2



TAIWAN  
Pat. M398147



TAIWAN  
Pat. 267646



TAIWAN  
Pat. 224195



TAIWAN  
Pat. 271532

**Safety Certification**



# Zeroplus Logic Analyzer can bring high profit and new earnings.

Saving time to debug

Time  
**90**%

## It is actually easy to get the digital signal

In the complicated development project, checking and debugging always occupy 90% of the whole time; if the bug can't be detected as scheduled, the time for coming into the market will be delayed.

## It's easy to find bug!

Logic Analyzer can analysis the digital signal and observe the logic signal of many lines simultaneously. The complexity of digital signal transmission is increasing, so how to capture the correct and effective section to develop the new project is very important. Zeroplus Logic Analyzer is your best developed tool.



YAMAHA KHS Music Co., Ltd  
Director of the RD Division  
Mr. Lin

Zeroplus Logic Analyzer is their sword!  
"Compact and complete". This Logic Analyzer only needs minutes to detect the problem which couldn't be detected by customer for many days, in this way much debugging time is saved. It is really a useful device for designing and debugging!

Zeroplus Logic Analyzer

can become your

Partner

### Customer Services

- It provides customized communication protocol analysis software designing.
- Support software updating.
- Support technical training.
- Warranty 2 years.
- Quality is guaranteed by passing Safety Certificate.



# Time is Money

Earning money from Logic Analyzer

Logic Analyzer is the necessary tool to shorten the time of research and development.

Logic analyzer is not only a checking and debugging device, but also a powerful weapon to quicken the research and development; in a word, it is an indispensable tool of earning money.

More Profit!

Rule of earning money: Achieve many things at one-shot



## Why bosses need it?

"Time is money". How to reduce the operation cost in the high competitive business environment is a topic which every businessman needs to know. In the electronic industry, speed is everything. Success belongs to the company who develops the product fastest. In order to achieve this goal, it is necessary for your research and development team by a competitive, proper and efficient tool.

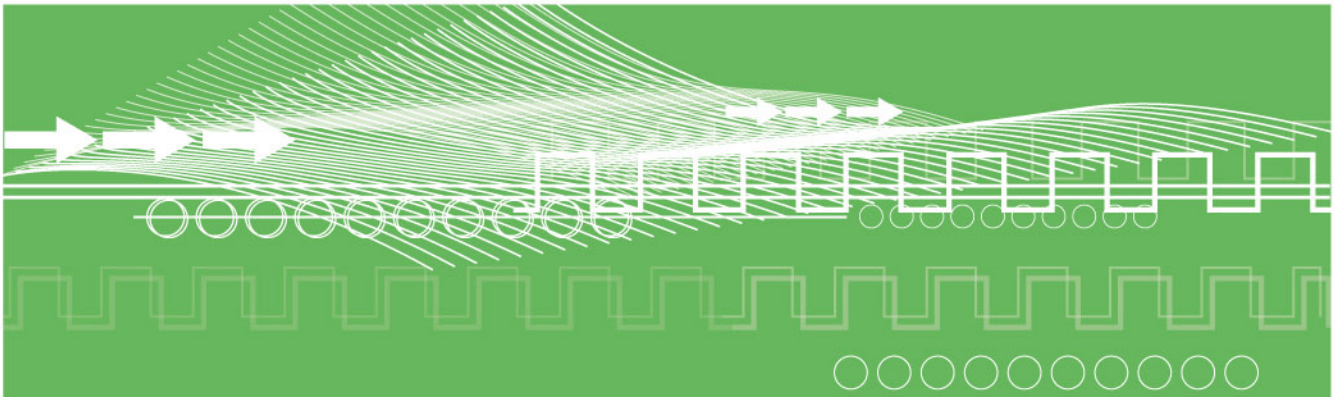
👉 Make profit in the high competitive business market. \$\$

In the process of enterprise development, whether you encounter following problems?

Although great efforts is made, still the time of research and development can't be shortened, the cost of equipment and personnel can't be efficiently controlled, the competitive power of the research and development team can't be improved.

**ZEROPLUS PC-Based Logic Analyzer is a necessary tool to reduce the time of research and development, it can bring additional profit.**

## Why engineers need it ?



Nowadays the digital technology is booming. Where there is electricity, there is digital signal. Digital electronic is applied in living, entertainment, video, sport, transportation and everywhere. Since people can't live without digital signal, it is engineers' responsibility to understand the change and principle of digital signal. "Good tools are essential to do the job well". Only with Logic Analyzer, engineers can develop and check properly and efficiently, so more projects can be completed easily.

The sooner is the debug, the shorter the RD of products takes.



ASUSTek Computer Inc.  
CM5, Broadband RD Division  
RD engineer Mr. Lin

Zeroplus Logic Analyzer is compact and light, unlike the bulkiness of those traditional machines. This transformation facilitates the construction in a measure environment and creates neatness. The patented compression feature of Zeroplus Logic Analyzer can lengthen the measure depth and capture more signals for one analysis. Compared with the depth provided by traditional machines, Zeroplus Logic Analyzer is much more economic. In addition, the user-friendly interface allows beginners to start operating the machine right away and serves as a spring board for users of traditional machines as well as a good teaching method. What comes to attention is that the feature of direct analysis of the LAP-A special BUS is very practical. When the measure objects are such common Buses as SPI and UART, the complicate calculation of 0010 is not necessary, which is a great tool for developing drivers.



Only with Logic Analyzer, engineers can develop and check properly and efficiently, so more projects can be completed easily.



### In the process of research and development, whether you encounter following problems?

Although much time is spent, still the project is always delayed, the problem can't be found, professional ability can't be improved.

**ZEROPLUS PC-Based Logic Analyzer is not only a checking and debugging device, but also a powerful weapon to quicken the research and development; in a word, it is an indispensable tool of earning money.**

# Zeroplus Logic Analyzer can bring benefit.

## Benefit analysis

The general time of one project from development to production will take around 3 months ( 12 weeks).

Research and development personnel	Various types of device	Project			
		Time of prototype development	Time of checking and debugging	Production	Memo
A	Development Time	4 weeks	4 weeks	4 weeks	12 weeks One oscilloscope is operated for one person
	Oscilloscope	[Timeline bar]			
B	Development Time	4 weeks	3 weeks	4 weeks	11 weeks Stand-Along Logic Analyzer is too expensive to operate, it has to be used by turns.
	Oscilloscope	[Timeline bar]			
	Stand-Along Logic Analyzer	[Timeline bar]			
C	Development Time	3 weeks	3 weeks	4 weeks	10 weeks Zeroplus Logic Analyzer is easy to understand, and used by everyone.
	Oscilloscope	[Timeline bar]			
	Zeroplus Logic Analyzer	[Timeline bar]			

### Using Zeroplus Logic Analyzer can save time for the company.

Suppose one project needs 3 months ( 12 weeks) to develop, the monthly salary of research and development personnel is USD 5,000. If Zeroplus Logic Analyzer is used in the process of "prototype development" and "checking and debugging", every project can be completed two weeks in advance. So the salary cost can be reduced by 1/6; that is to say, **USD 2,500 is saved for each project.**

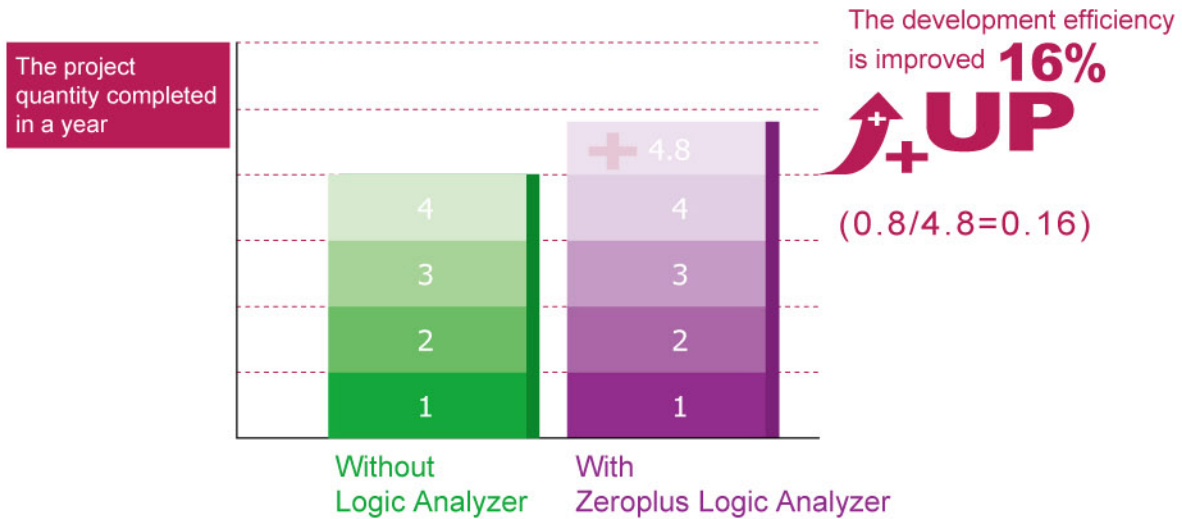
5,000 USD/person × 3/month = 15,000  
 5,000 USD/person × 2.5/month = 12,500  
**Salary cost saving** 15,000 - 12,500 = 2,500



**Reduce the salary cost of staff**

## Using Zeroplus Logic Analyzer can bring the benefit for the company.

If one project needs 3 months(12 weeks) to develop, then 4 projects can be completed in a year(48 weeks). With Zeroplus Logic Analyzer, the time for developing a project can be reduced by 2 weeks (which means one project can be completed in 2.5 months), so 4.8 projects can be completed in a year, the efficiency is improved by 16%.



## Take a view of the life cycle of single product. Suppose product X needs one year to develop and be available in sale for three years.

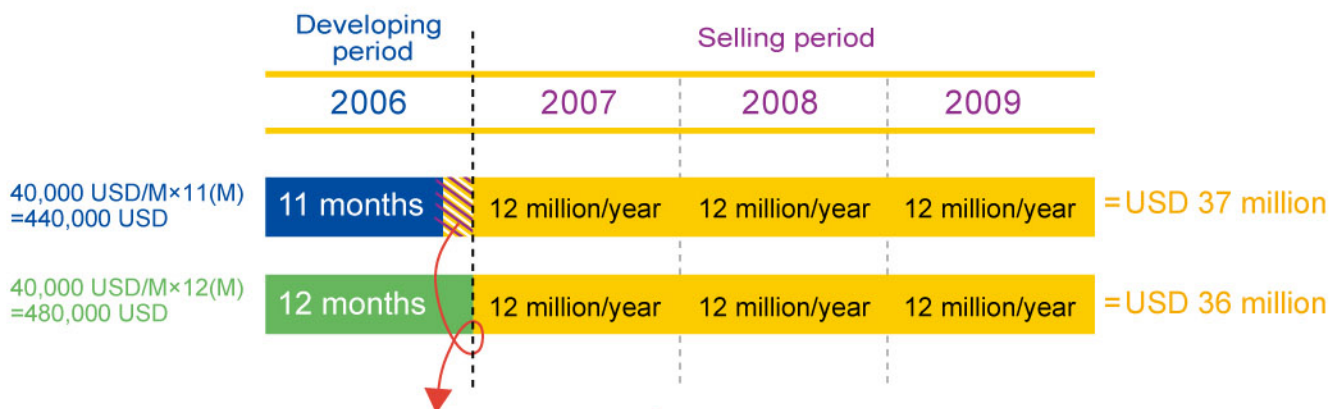
If the product's development is finished one month ahead of schedule,

then the salary can be saved by USD 40,000 (suppose there are 8 staff in the project team).

\*There are 8 staff in the project team including: 3 R&D engineers, 1 test engineer and 1 assistant.

If the product is launched one month ahead of schedule,

If the monthly sales turnover is USD 1 million, then additional USD 1 million can be earned if the product comes into the market one month in advance.



Reduce the development time ( **USD 40,000** salary cost can be saved a month.)  
 + come into the market in advance ( **USD 1 million** can be earned additionally).

**Zeroplus Logic Analyzer can bring high profit and new earnings.**

# Application of Zeroplus Logic Analyzer in Electronic Industry.

## Consumer Electronics

-  Quanta Computer Incorporated
-  微星科技 Micro-Star International Co., Ltd.
-  KHS K.H.S Musical Co., Ltd.
-  Transcend Transcend Information, Inc.
-  SUNPLUS Sunplus Technology Co., Ltd.
-  Qisda Qisda Corporation
-  Inventec Inventec Corporation
-  Logitech Logitech.
-  ASUS ASUSTeK Computer Inc.
-  5XLK Cheng Uei Precision Industry Co., Ltd.
-  MITAC 神達電腦 MITAC International Corporation.
-  TECOM 東訊股份有限公司 Tecom Co., Ltd.,

## Academic Research

-  National Taipei University of Technology
-  Southern Taiwan University of Science and Technology
-  National Chiao Tung University
-  Lunghwa University of Science and Technology
-  義守大學 I-Shou University
-  Academia Sinica
-  Industrial Technology Research Institute
-  Tamkang University
-  國立清華大學 National Tsing Hua University
-  明新科技大學 Minghsin University of Science and Technology

## IC Design

-  ATMEL Atmel Corporation
-  REALTEK Realtek Semiconductor Corp.
-  winbond Winbond Electronics Corp.
-  SONIX Sonix Technology Co., Ltd.,
-  NOVATEK Novatek Microelectronics Corp.
-  ELAN 萬應電子股份有限公司 ELAN MICROELECTRONICS CORP. ELAN Microelectronics Corp.
-  SiliconMotion 慧榮科技股份有限公司 Silicon Motion, Inc.
-  RENESAS Renesas Electronics Corporation.
-  Mstar MStar Semiconductor, Inc.
-  BROADCOM Broadcom Asia Distribution Pte. Ltd

## Automotive

-  Actron Technology Corporation.
-  ARTC Automotive Research & Testing Center
-  Hua-chuang Automobile Information Technical Center Co., Ltd.,

## Optical Electronics

-  ELDT Evalight Technology Co., Ltd
-  HERAN 聯碩光電 Heran Co., Ltd
-  SOI Silicon Optronics, Inc.

## Industrial Computer

-  精技電腦 Unitech Computer Co., Ltd.

## Industrial Control

-  TECO TECO Corp.
-  遠東新世紀 FAR EASTERN NEW CENTURY Far Eastern New Century Corporation

## Other

-  中興保安 SECOM Taiwan Secom Co., Ltd.

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