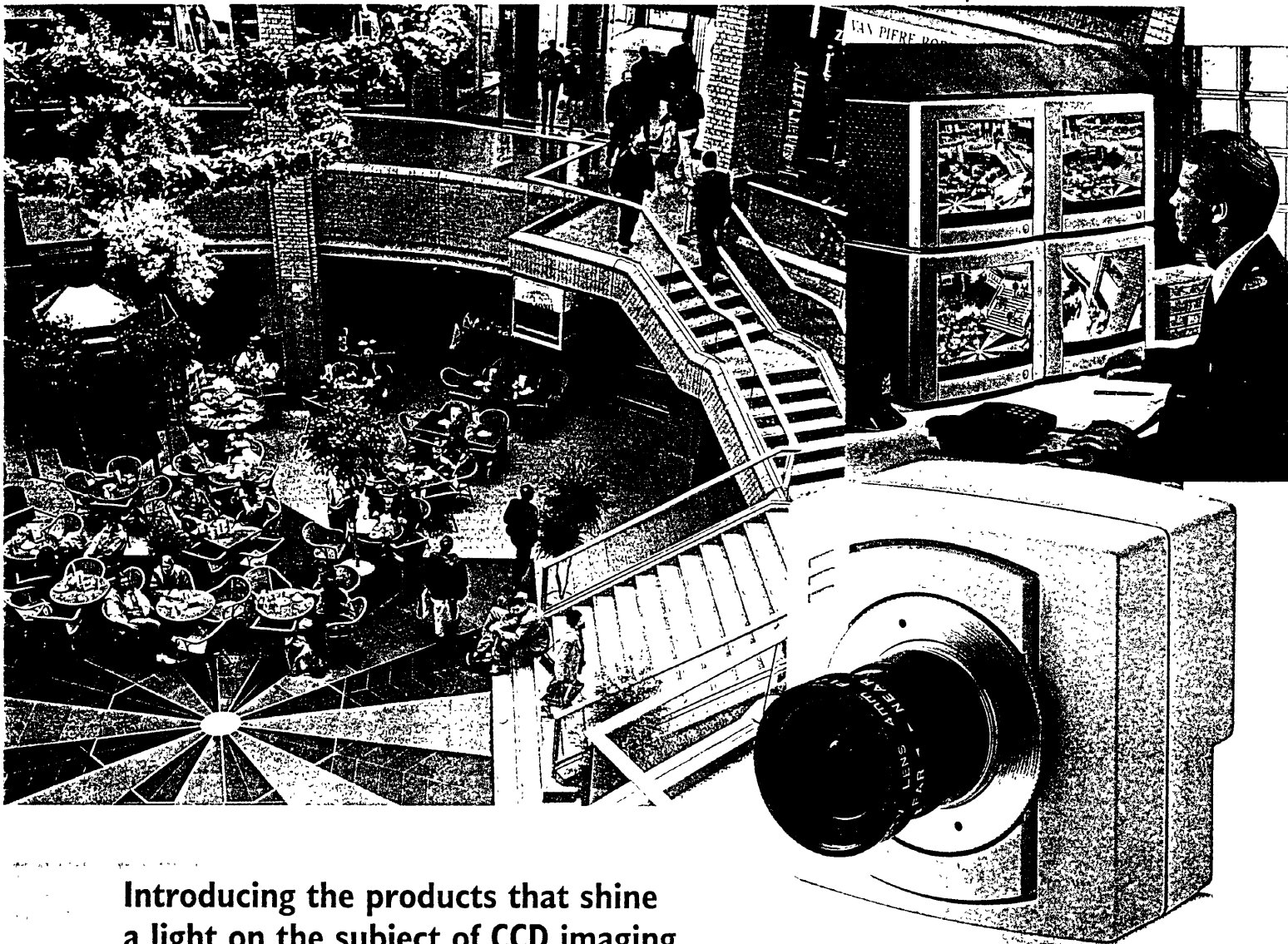


# MONOCHROME *Intermission* CAMERAS & MODULES

736-107



## Introducing the products that shine a light on the subject of CCD imaging

Meet the range. These compact cameras and camera modules give outstanding performance and operate cost effectively in a wide variety of application areas.

VCM 6450  
VCM 6350  
camera

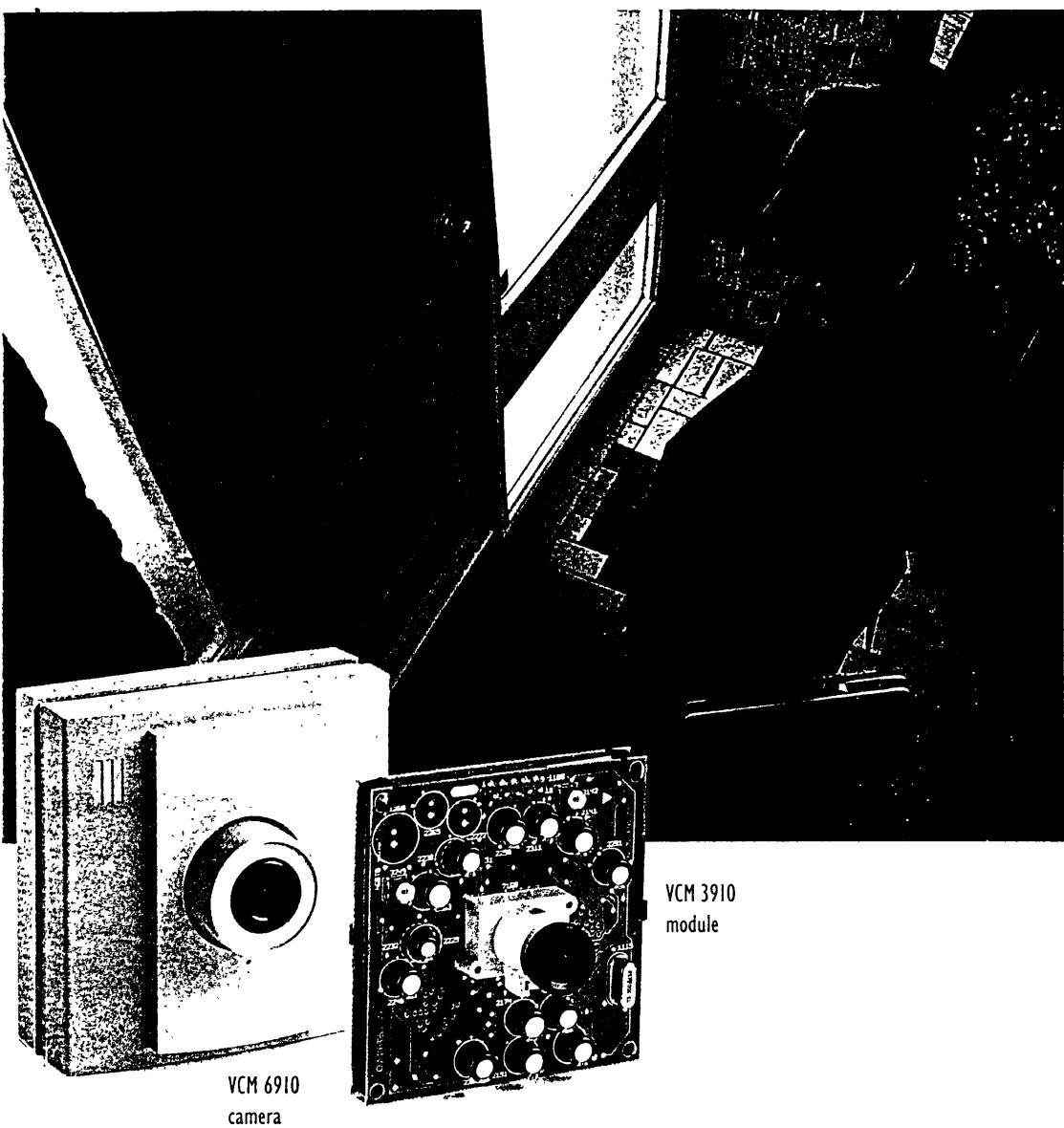
### The Key features:

- Light sensitivity  $< 0.1$  Lux
- Easy system integration
- External synchronisation modes
- Integrated lens or CS-mount
- Electronic, passive or active iris control
- Basic, Medium and High resolution
- Flexible power supply
- Manual or auto shutter speed control
- Interlaced or non interlaced
- Very cost efficient

Video  
Camera  
Modules



# PHILIPS



VCM 6910  
camera

VCM 3910  
module

## Philips Basic Range Tailored for consumer and semi professional environments

This basic range has a light sensitivity of less than 1 Lux and all standard control facilities.

Featuring:	Applications:
• Electronic iris	• Door phone
• Gamma correction	• Rear vision
• Contour enhance	• Child watching
• Auto gain control	• Home observation

## Philips High Performance Range Covering the complete professional market

Choose from two main configurations

The very compact single board for optimal customized design.

Its intelligent features result in a sharp and constantly stable image under a wide variety of lighting conditions. At fast moving objects, computerized image control and measurement purposes, the single board produces a clear and processable picture.

The single board with additional interface.

This dual board model is designed for perfect synchronisation in multi camera systems. It allows for the use of cheap passive and active iris lenses. High-end security, such as banking and air transport, is one of the specific applications of this module.

## Philips monochrome cameras and modules for a wide variety of applications

**From the basic camera to the top of the line high resolution camera module. Philips has got you covered.**

Meeting application requirements for the entire CCD imaging market is what Philips Video Camera Modules (VCM) is all about. In every aspect the VCM imaging products are ideally suited for the security, machine vision and industrial automation world. The product range is high performing, compact and cost efficient.

### Daylight or darkness

Philips monochrome cameras operate under the most diverse circumstances: from bright daylight to near darkness, from outdoor to indoor fluorescent light, from near by close-ups to far away details, from fast moving objects to detailed still pictures.

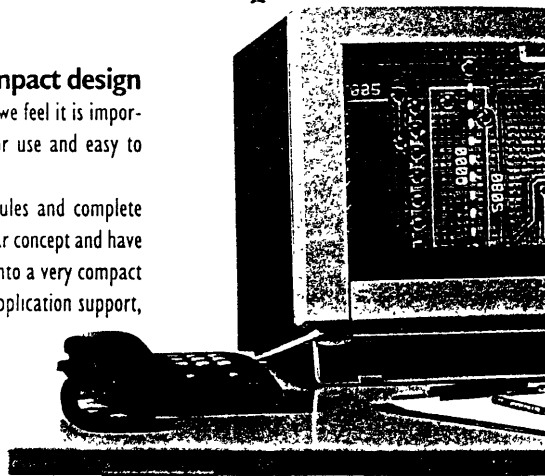
### Cost Efficiency

All Philips monochrome cameras and modules give you cost efficient solutions for various applications. The modular design means you choose the right camera or module needed to meet your applications.

### Easy system integration & compact design

In addition to excellent image performance, we feel it is important to provide you with products ready for use and easy to integrate in your own application.

Our product range consists of flexible modules and complete cameras. The modules are based on a modular concept and have a remote CCD possibility. It enables packing into a very compact housing. To provide you with an extensive application support, dedicated Philips engineers are on stand by.



VCM 3305 / VCM 3405

single board

single board plus interface

VCM 3350 / VCM 3450 dual board

**Featuring:**

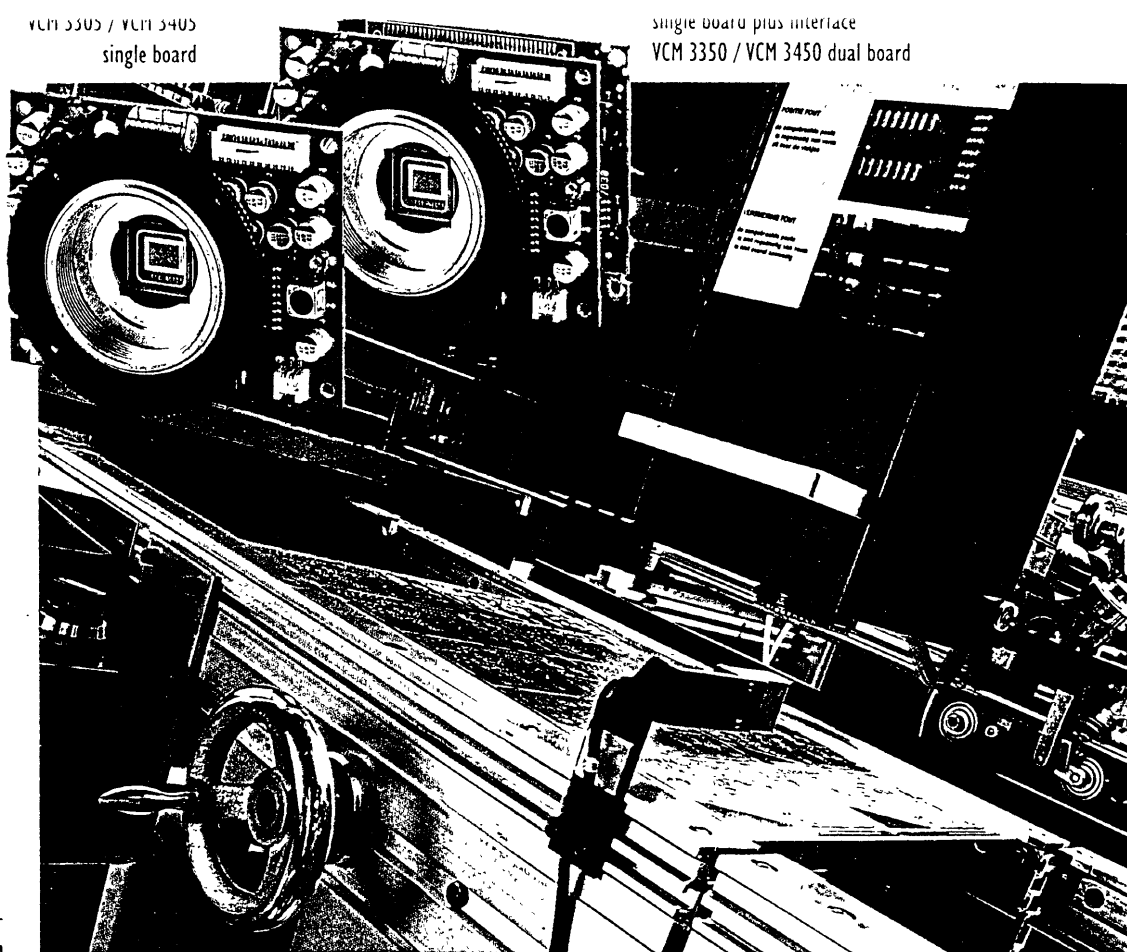
- Interlaced or non interlaced mode
- Field or frame integration
- Selectable shutter speeds
- Electronic <sup>sb</sup> + <sup>db</sup>, passive or active iris control <sup>db</sup>
- Auto or manual gain control
- Flexible AC-DC power supply <sup>db</sup>
- H&V lock <sup>sb</sup> + <sup>db</sup>, line lock <sup>db</sup>
- Min. illumination < 0.1 lux

<sup>sb</sup>: single board model    <sup>db</sup>: dual board model

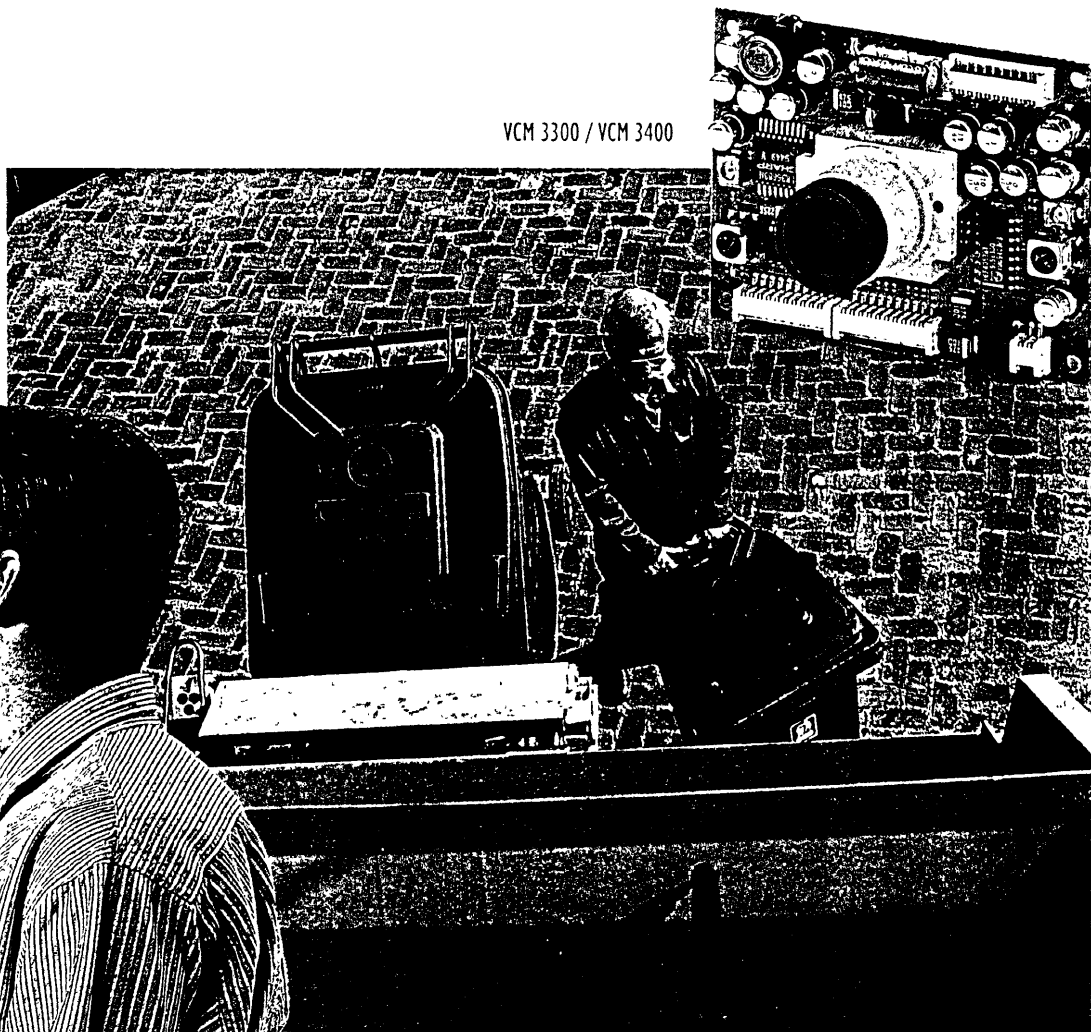
**Applications:**

- Machine vision
- Medical
- Licence plate scanning
- ID code reading
- Personal identification
- High-end security
- Complex production control
- Industrial automation
- Mass observation

Both configuration types feature external synchronisation modes, gain- and gamma control, an integrated lens or CS-Mount and optional microphone. The integrated lens is set at a fixed focal distance of 0.6 m-∞, enabling identification in a wide field of view. Manually the lens can be adjusted for distances < 0.6 metres. The CS-mount versions accept all standard CS-mount lenses. With an adaptor ring the use of conventional C-mount lenses is also possible.



VCM 3300 / VCM 3400



**PHILIPS-VCM THE VISION TO LEAD IN IMAGIN**

## CAMERAS

## MODULES

Resolution	Lens mount	Minimum illumination	Model no.	Resolution	Lens mount	Minimum illumination	Configuration	Model no.
<b>High Performance range</b>								
High (560 TV lines)	CS	<0,1 Lux	VCM 6450	High (560 TV lines)	CS	<0,1 Lux	dual-board	VCM 3450
					Integrated	<0,1 Lux	single-board	VCM 3405
Medium (380 TV lines)	CS	<0,1 Lux	VCM 6350	Medium (380 TV lines)	CS	<0,1 Lux	single-board	VCM 3400
					Integrated	<0,1 Lux	dual-board	VCM 3350
							single-board	VCM 3305
							single-board	VCM 3300
<b>Basic range</b>								
Basic (280 TV lines)	Integrated	<1,0 Lux	VCM 6910	Basic (280 TV lines)	Integrated	<1,0 Lux	dual-board	VCM 3910

## TECHNICAL SPECIFICATIONS

Type	VCM 6450	VCM 3450	VCM 3405	VCM 3400	VCM 6350	VCM 3350	VCM 3305	VCM 3300	VCM 6910	VCM 3910
Image	Monochrome									
TV standard	CCIR/EIA									
Active pixels (HxV)	768x582 (CCIR) / 768x492 (EIA)				512x582 (CCIR) / 512x492 (EIA)				362x582 (CCIR) / 362x492 (EIA)	
CCD sensor	1/3" Inter-line transfer									
Lens mount	CS		Integrated		CS			Integrated		
Configuration (I)	camera	2B	1B		camera	2B	1B		camera	2B
Viewing angle				72x54 deg				72x54 deg		
Hor. resolution (TV Lines)	560				380				280	
Min. illumination	<0.1Lux (F1.2)								<1.0 Lux (F2.0)	
Interlaced mode		selectable on/off				selectable on/off				
Integration mode		selectable field/frame				selectable field/frame				
BLC		selectable on/off				selectable on/off				
Shutterspeed		selectable/ presets/ flickerless/electronic iris				selectable/ presets/ flickerless/electronic iris			automatic/ flickerless	
S/N	> 50 dB								> 48 dB	
Iris control	electronic/ passive	electronic/ passive/ active	electronic		electronic/ passive	electronic/ passive/ active	electronic		electronic	
CYBS output (75 Ohm)	1 Vpp									
Gamma correction	fixed 0.45	0.45 or 1.0			fixed 0.45	0.45 or 1.0			fixed 0.45	
Contour enhance	yes	selectable on PCB			yes	selectable on PCB			yes	
Gain control	automatic	automatic or manual			automatic	automatic or manual			automatic	
Synchronisation	free running/ Line lock	free running/ H&V lock/ Line lock	free running/H&V lock		free running/ Line lock	free running/ H&V lock/ Line lock	free running/H&V lock		free running	
Power supply	DC 10.8-34V, AC 12-24V		DC 7-10V protected		DC 10.8-34V, AC 12-24V		DC 7-10V protected		DC 9.6-34V	
Power consumption	<2.5 Watt		<1.5 Watt at 7V DC		<2.5 Watt		<1.5 Watt at 7V DC		<1 Watt	
Dimensions (WxHxD)	70x72.5x59mm	55x42x38mm	55x42x16mm	55x42x25mm (incl. lens)	70x72.5x59mm	55x42x38mm	55x42x16mm	55x42x25mm (incl. lens)	70x70x54mm (incl. lens)	63x65x46.5mm (incl. lens)
Interface	BNC, Screwblock	Stripped wires			BNC, Screwblock	Stripped wires			Cinch, Screwblock	

(I) 1B = single board

2B = dual board

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Distributed by:



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**LIPS**