

Technology opportunities

from China

CAD for hydraulic components and system

Item_id: L98021006408

This system is compatible with all kinds of plotters and digitizers supported by the AUTOCAD system. Because of its lower cost and easy operation, it has been widely used in hydraulic components and system manufacturing companies. It is composed of 10 sub-systems and has a modular structure.

Digital display module

Item_id: L98008006337

This electronic digital module is based on a capacitive grating technique. It is mainly used to accurately measure the displacement of other parameters that can be transformed into displacement or *vice versa*. The digital module features a compact structure, low power consumption, high accuracy and reliability.

Optical fibre interconnection (OFI) technology

Item_id: L97000205077

The OFI technology features high transmission speed and bandwidth, and powerful anti-disturbance. It is simple, reliable, economical and easy to compact. Current OFI applications are an optical fibre interconnection network (OFIN) for massively parallel array and an optical fibre communication link (OFCL), as well as optoelectronic transceiver devices (OTD).

Sputtering thin film pressure transducer

Item_id: L96005803454

The sputtering thin film pressure transducer is suitable for measuring hydraulic pressures in the aviation, petroleum and chemical industries and is also applicable to automatic control systems.

Digital computer-controlled structure test system

Item_id: L96005802446

In this new, fully digital computer-controlled structure test system, different parameters are set through consoles and adjusted automatically by a computer. The system can simultaneously perform up to 8 independent tests. It has a user-friendly man-machine interface. It has high reliability and a long service life.

Automatic input and management system

Item_id: L95900101195

TH-DAIMS reads engineering drawings and provides full menu commands for interactive modification and design. It is very useful in the petroline industry, transportation, chemical industry, power, astronomy, and so on.

Supersonic rinser with new technology

Item_id: L97900104387

A supersonic rinse is an effective and necessary washing method used in electronics, precision machinery, instrumenta-

tion optics, medical industry, etc. The IGBT supersonic rinser, with its new technology, decreases environmental pollution, shows much better and faster wash results and costs less.

Monitoring and control system for power substations

Item_id: L95900100499

The UNIS SM-1 monitoring and control system is suitable for all kinds of power substations, power plants and other fields. It comprises different kinds of single chip microprocessor intelligent modules, connected to a host computer through their respective interfaces. Faults in a wiring system can be detected very rapidly.

Interactive digital multimedia service

Item_id: L02227715726

IPTV is an interactive digital multimedia service that uses a cable TV network as a broadband communication infrastructure and TV or PC as main user terminal.

Automatic measuring system for 3-D objects

Item_id: L01129812737

This testing is based on an automatic analysis technique of fringe patterns with high precision developed in recent years. The system can be used for industry on-line quality control, design and manufacture of moulds, robot vision, CAD/CAM, and medical diagnosis.

Engine management system

Item_id: L98008006306

This is an integrated network of advanced automobile engine control subsystems. It uses a microprocessor to control fuel-air mixture, atomization, fuel supply, spark timing, and so on, thus improving the exhaust, increasing the driveability and reducing the fuel consumption.

Electronic simulative power load

Item_id: L02427715703

This is a kind of tester to test direct power supply. It conserves energy and solves the problem of warming in the proving ground. It has a small volume and light weight. Simulative power is continuously adjustable. It obviates the need for the proving ground to prepare a large power-supply capacity. Finally, the electronic energy fed back helps to compensate the power factor of an electric power system to some extent.

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Technology opportunities

from India

Communication substrate for cluster of multiprocessors

This is an augmentation of the AM II software, provided by University of California, Berkeley.

Cluster monitoring system

This system offers a portable, flexible, and comprehensive environment for monitoring of large clusters.

Building-in quality

The MetricAdvisor evaluates key software metrics and graphically presents the structure of the programme.

Interconnecting clusters of workstations

PARAMNet-II offers the best price/performance ratio for interconnecting high-performance clusters of workstations.

Reconfigurable computing system card

Reconfigurable computing explores hw/sw solutions where the underlying hardware is modified at runtime as required.

Complete geomatics solution

Geomatica unites separate technologies for remote sensing image processing, GIS, digital photogrammetry, and digital cartography into a single modular environment.

Digital photogrammetry software

This orthorectifies data builds map-accurate imagery, and supports 3D visualization, DEM editing and feature extraction.

Web-based geomatics solution

The WebServer allows custom web-based spatial analysis applications.

Automatic raster to vector conversion software

R2V is the most advanced raster for automated map digitizing and GIS data capture applications.

Terrain visualization software

FLY! is a terrain visualization tool that drapes imagery and vectors to create 3D "flythrough" scenes in near real-time.

Automatic geocoding and compositing

PCI Geocomp offers automated geocoding and compositing of AVHRR imagery, high accuracy geometric correction, fire hot spot mask, global change research, and vegetation health/vigour products.

Object-oriented image analysis

eCognition is a powerful and universal technology for multi-scale analysis of earth observation data of all kinds.

Interferometric SAR workstation

INSAR generates digital elevation models and deformation maps from space-borne synthetic aperture radar imagery.

Advanced precision processor

APP converts raw space-borne synthetic aperture radar data into high-quality image products.

Electronic light table

RemoteView is an application for the operational exploitation of high-resolution remote-sensing data over broad areas.

Raster GIS

ILWIS integrates image, vector and thematic data into one unique and powerful package on the desktop.

Scalable computing cluster

This is a next-generation high-performance scalable computing cluster, with a peak computing power of 1 Teraflop.

Supercomputers

Supercomputer PARAM 10000 consolidates servers for building general-purpose high-performance computing facilities.

Low-cost supercomputing

PARAM Anant is a low-cost supercomputing solution, upgradeable at the system, component and technology levels.

Open platform solution

COPS has been deployed successfully in load despatch centres of the power sector and energy management systems at major steel plants in India.

Laboratory management and automation system

LAMAS provides a comprehensive workflow automation for an R&D testing laboratory.

Supercomputing-based decision support system

SD2000 uses mathematical, statistical and artificial intelligence for optimizing returns while trading in financial markets.

Web application development tool

This tool develops interactive Indian language applications to be deployed over the Internet or intranet.

Java enabled tools

This software development kit enables the creation of content in Indian scripts.

For more information, contact:

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Technology opportunities

from Korea, Republic of

Diameter-based AAA sub-protocol technology

This protocol supports a multi-interface over SCTP modes. A diameter protocol is an AAA protocol for authentication, authorization and accounting in a mobile Internet environment.

Diameter-based AAA technology

This AAA information protection technology provides authentication, authorization, and accounting functions to wireless Internet users under the IMT-2000 environment or PSTN wireless LAN environment.

Connection support in public wireless LAN

The IPv4 connection-supporting technology in a public wireless LAN dynamically obtains an IPv4 address to communicate with the external IPv4 node under the IPv6 public wireless LAN environment, thereby efficiently enabling the IPv4-IPv6 connections without IPv4/IPv6 conversion.

IPv6 introduction under public wireless LAN

This is a reliable security operating system technology based on FreeBSD with user interface adjusted to user authentication, audit trailing, encoding file system, reliable channel, and an access control function to protect the system from hacking.

Localizing multiple sound sources moving in 3D space

This advanced digital sound processing technology localizes the sounds of moving contents in a space while playing a game. It is based on principles of locating spatial sound through both ears of a human being.

Digital rights management

This technology protects various digital contents, such as electronic books, music files, image information, games, software, and images from various forms of piracies, and enables contents service charges by using the protected contents.

Synthetic e-CRM method and UMS-based system

This integrated CRM system enables members to directly modify and use necessary fields and items according to business types and fields of each enterprise environment.

SecureFlex MT

This VPN transmission technology supports multi-tunnel IP-SEC. This technology overcomes the restriction of creating a VPN tunnel through another line only when the corresponding VPN tunnel is disconnected.

Powerline communication LAN device

This technology uses 3-phase 4-line power lines as communication lines, forming the speech line between the power

line communication unit controllers by a bridge function, and connecting the power line communication unit controllers to the Internet by a routing function.

Optical-fibre monitoring distribution system

This technology is used for optical-fibre monitoring, collecting/analyzing line status information, generating information to the corresponding area or the remote place, then storing the failure information in a database.

System development technology

This system development technology provides a 5Gbps switch-router and an MPLS system development technology.

Manufacture of nano electronic material powder

This technology enables the manufacture of nano electronic material powder by using a consecutive progression synthesis reactor. This remarkably improves voltage characteristics, thereby improving the brightness and efficiency of the panel.

Genetic marker for CATCH-22 syndrome

The CATCH-22 syndrome is caused by an abnormal chromosome. This marker helps to identify it in human genome DNA and human liver DNA library. A kit using this marker can quickly diagnose related syndromes including Di George's syndrome.

Recombinant UXPase production

This production method uses recombinant UXPase with expression vector containing nucleotide sequence determined UXPase gene. This is purified and shows biochemical properties such as substrate specificity, optimal temperature, and salts effect on enzyme activity.

PMMV relicase gene

This is useful for the selection of pepper varieties especially resistant to Korea derived-PMMV. The application provides anti-viral pepper by producing transformed crop to express PMMV replicase gene partially in plant cell.

Binding colesteroles and detecting lipophilic

This process provides RNA materials that bind specifically with lipophilic materials, especially colesteroles and derivatives that have esterase activity. It provides quantification and detection methods.

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Technology opportunities from Malaysia

Ultrasonic imaging systems for non-destructive inspection

Precision imaging of defects

Defects in metal, composite or ceramic materials can be accurately measured and characterized by computer-controlled high-precision ultrasonic scanning systems.

Portable ultrasonic system for *in-situ* inspections

This enables flaw detection and characterization in flat, curved or irregular shaped material.

Corrosion and erosion mapping

ANDSCAN is a versatile portable real-time C-scan inspection system designed for manual scanning of flat, curved or even irregular shaped components in industries where precise, repeatable inspections are required.

Plant assessments technology

COLSCAN (column scanning or gamma scanning)

COLSCAN is a non-destructive, non-invasive process investigation and troubleshooting technique for on-line column assessment. It has gained wide acceptance in the oil and gas, chemical and petrochemical industries.

Spot level and interface detection

LevSCAN is a rapid non-destructive, non-invasive, on-line technique to measure level and interfaces (e.g. water/oil, oil/gas) in process or storage vessels.

Detection of corrosion under insulation (CUI)

This is an effective method to detect CUI of steel pipes.

CT for materials characterization/imaging

This CT imaging technique enables the detection of internal defects in structural materials without physically sectioning it.

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Flexible manufacturing automation: transportable robot

This is a transportable robotics system for material handling and to facilitate the manufacturing process in a manufacturing

environment. The main aim of the project is to improve the material flow system within a workshop.

Mini automated machining cell (MAMC)

This comprises a transfer robot and a PC-based drilling machine communicating with each other via a software interface to perform a programmed task.

Automatic labelling machine (ALM)

This performs automated product labelling for reliable and consistent production output. It caters to the need of automated product labelling for a wide range of manufacturing industry.

System development

E-Time

This is a web based application capable of collecting and storing attendance-related information in a geographically scattered environment. It is used to monitor the time attendance of employees in an organization.

E-Health

E-Health is a computerized health management information system making use of a single multipurpose smartcard to store employee information, such as employee ID, name, biodata and others. Among its benefits are efficient clinic/panel management, enables electronic invoicing, customization of personal biodata, storage and manipulation of important health information such as allergies and diseases and storage of health history of employees.

E-Door

This is a door security system which controls the security for doors in different buildings within the same area or compound. Benefits include:

- A more secure door security system
- Restricted control to building access
- Realtime activity monitoring
- Generating report of presence
- Reduction of time spent on checking door status

For more information, contact:

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Technology opportunities

from The Philippines

Remote control system through telephone

This is a microprocessor-based system that can remotely monitor and control household devices such as lights, appliances and other electrical devices, and features synthesized speech.

Generic data acquisition system

This system is a microcomputer-based data logger and controller for automated data acquisition, measurement and control of processes in an industrial environment.

Gemstone autofaceter

This microcomputer-based machine automatically grinds gemstones at successive faces through the touch of a keypad.

Ultrasonic cleaning equipment

This microcontroller-based equipment cleans jewelry and precision tools that are difficult to clean by conventional methods.

Ultraviolet fluorescence viewer

This is designed for reliability and durability with rechargeable battery power, making it suitable for field work.

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Web: <http://mis.dost.gov.ph/itdi/>*

Diagnostic kit for monitoring red tide toxins

Monoclonal technology detects red tide toxins, which cause paralytic shellfish poisoning, at levels as low as 5 ppb.

CR-based detection kit

These kits, based on polymerase chain reaction, quickly detect specific bacterial pathogens or microorganisms in food.

Vaccine against *H. paragallinarum*

This vaccine is being developed to protect poultry from the infectious coryza disease, which causes their high morbidity.

Tissue culture with medicinal values

Certain plants are being cultured as sources of alkaloids that can be manufactured into anti-cancer drugs.

Plant diagnostic kits

These monoclonal antibody-based kits diagnose, at the earliest stages, specific plant diseases like papaya ringspot, banana bract mosaic, citrus tristeza and banana bunchy top.

BIO-HS vaccine for hemorrhagic septicemia

This is used for the immunization of young cows and carabaos against hemorrhagic septicemia

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Digital microwave radio

Nera CompactLink

This full-featured, microwave radio system is designed for the global transmission of voice, data and video traffic.

Nera FlexLink

This low and medium capacity microwave access solution has several innovations for cellular base station transmission.

Nera InterLink

These are long-distance high-capacity communication solutions that offer the generic benefits of microwave radio networks.

Satellite terminals

Nera F33

Nera F33 introduces cost-effective maritime communications, even when out of reach of mobile phone or radio networks.

Nera F77

Nera F77 gives ships online access to a whole range of applications like the Internet and e-mail.

Nera Saturn B

This enables communication for vessels via telephone, telex, data and fax, using the Inmarsat global satellite system.

Nera WorldPhone Marine

This is a global advanced satellite telephone, which provides voice, fax and data capabilities.

Nera WorldCommunicator

This gives global access to the Internet and e-mail, data files, faxes and voice transmission from one compact unit.

Nera WorldPhone

This is one of the smallest, lightest global phones in the world, useful for fax, data, scanned images and e-mail.

Wireless broadband access solutions

These provide the capacity, speed and reliability to support the Internet, digital TV and interactive services for operators, broadcasters, ISPs and telecommunication service providers.

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Technology opportunities

from Russia

Immuno-assay analyzer

The "Multiphot" analyzer can determine antigens of viral, bacteritic and parasitogenic origin, specific antibodies, biological active substances and medicinal preparations. The analyzer indicates measurement results in units of optical density with qualitative estimation of reaction or without it as well as in units of concentration.

Automatic computer system for talk recording

MAG - XXI represents advanced technologies in documentary talk recording. It provides recording, storing and playing back of any acoustic signal, automatic number determination and registration of incoming and outgoing calls.

Remote data communication

This dedicated software-emitter "sets" useful information as acoustic colouration upon an electromagnetic field, such as the contents of a monitor, or files stored in computer memory. This makes it possible to decode messages received 6-7 metres from the computer.

Navigation receiver board

The BNP 12/8 MS navigation receiver board automatically searches, receives and processes signals of GPS and GLONASS satellite navigation systems via channels defined by an external control programme.

Two-channel station

The unattended, two-channel station "STELA" has a communication processor that incorporates the functions of a multiplexer/demultiplexer, remote control of the station via SNMP protocol, remote setting of operation channel frequency and emission power.

Versatile ground station

The UNS versatile ground station is designed for reception and processing of telemetric data. UNS is a set of versatile receiver boards which are installed in a PC as extension boards and a receiver driver.

Support system for algorithmic and indicator maintenance

The system is in the form of a local computer web. The system allows storage, operating search and documentation of information. The system takes into account the organizational and technological level of the users.

Digital photogrammetric system

This system, "Z-Space" is designed for topographic and thematic maps updating for vast areas; populating GIS databases; and mission rehearsal and crew training.

Applications of non-contact measurement technology

This technology provides precise measurements of 3D objects, based on their images acquired on the different aspect angles. The system for 3D-measurements includes: a set of CCD video cameras; a PC equipped with frame grabber(s); a set of test fields for system calibration and orientation; a structural light (SL) projector; and appropriate software.

Analogue signal analyzer programme

The core of this programme is a digitized analogue signal analyzer, used for settling a wide spectrum of problems of different natures and purposes by combining it with other programme modules.

Automatic processing of aerial and cosmic images

This application software is developed for the automatic processing, analysis, matching and merging of aerial and cosmic images. A set of independent software tools is connected together within the framework of a common software shell with a friendly graphic user interface.

Telematic interaction system

Technology REX-400 ensures clear interaction with all telematic services, including fax, telex, telegraphy, e-mail, paper (regular) and voice communication, and provides clear interface with WWW - and other Internet technologies.

Light beam homogenizers

This optical device solves the problem of homogenizing energy distribution on a spot. LBH is especially used for the surface processing of different objects, for example: for laser case-hardening and coating; or laser photolithography; for laser dermatology; and for scientific experiments.

Diode-pumped neodymium laser

This small laser consists of two replaceable solid-state emitters with collimating heads, heat-proof laser diode with focusing optical head and power supply unit. It can be used for micromachining materials, manufacturing and assembling microelectronic devices, optical measurements, adjustment of optical devices, in polygraphy and interferometry.

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