

C O M P E T E N C E

R E S P O N S I B I L I T Y

C A P A B I L I T Y

M O T I V A T I O N

F L E X I B I L I T Y

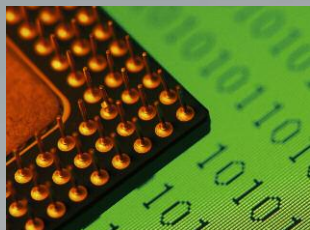
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Leading Manufacturer

C H A N N E L M I C R O E L E C T R O N I C
L I N E - C A R D

A ASIC



GATE ARRAY:

- Prefabricated bulk of transistors arranged in form of an array which are connected by customers' design
- 0,35µm S1L50K-series -> 815k Row gates, 4LM
- 0,25µm S1L60K series -> 1.007k Row gates, 4LM
- 0,6µm S1L35K -Series -> 161k Row gates, 3LM

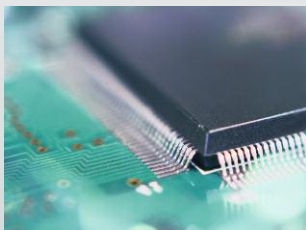
EMBEDDED ARRAY:

- An embedded array combines the function of a Gate Array with system level functions as hardmakros
- 0,35µm S1x50k Series
- 0,25µm S1x60k Series
- 0,18µm S1x70k Series
- Hardmakros: ROM; RAM; I/O; CPU; Analog; etc.

MIXED SIGNAL:

- Specialized for automotive
- High voltage process
- -> 120V; -> 10A; -> 200°C
- Low power
- EPROM; Flash, ROM; RISC; HC05; HC012

A ASSP



DISPLAY CONTROLLER:

- Standard LCD-controller
- OLED-controller
- Image-controller

EPD-CONTROLLER / DRIVER:

- Standard-controller for color AM and monochrome EPD-displays
- Segmented-EPD-driver-ICs

LED-DRIVER:

- RGB-driver
- Single- and multichannel-driver
- Power-LED driver

BUS-/INTERFACE-ICs:

- KNX/EIB transceiver
- I/O-Link transceiver/dual and master/slave
- IEEE 1394-ICs
- Network-controllers
- USB
- LIN-BUS
- CAN-BUS

MOTOR DRIVER-ICs:

- Fan-control
- Ripple-counter
- Bus-controlled stepper-motor-driver
- EC motor-controller
- BLDC motor-ICs

B BATTERIES



LITHIUM BATTERIES:

- Standard coin cells
- Tabbed cells (two/three pin)
- Power Modules
- Custom solutions
- Encapsulated miniature-batteries
- Silveroxide
- 3 Volt lithium-manganese dioxide batteries

RECHARGEABLE BATTERIES:

- Lithium coin cells
- Lithium-polymer batteries (Li-Po)

BATTERY HOLDERS:

- Through-hole vertical and horizontal
- SMT
- Low-cost metal SMT holder

D TIMING DEVICES



CRYSTALS:

- Low-medium-high-frequency
- SMD-types
- Cylinder-types
- Clock-crystals

HC49 CRYSTALS:

- HC49
- HC49 U
- HC49 US (SMD)

OSCILLATORS:

- Low-medium-high-frequency
- DIP & SMD
- LOW Jitter
- Spread-spectrum
- Programmable (PLL)
- Voltage-controlled (VCXO)
- Temperature-compensated (TCXO)
- Multi-output

SENSING DEVICES:

- Gyro Sensor
- Quartz Pressure Sensor
- Temp. Sensing Crystal

RTCs:

- Crystal built-in
- 3 Wire-serial
- 4 Wire-serial
- 4bit parallel
- I²C-BUS
- 3,4ppm to 20ppm

SAW FILTER

O OPTICAL DEVICES



E-PAPER-DISPLAYS:

- Bistable
- Reflective
- Robust against shock and vibration
- Monochrome & tricolor

Active Matrix:

- 1,4" to 13,3"
- Up to 300 DPI
- COG
- EPD-PCAP-Modules

Customized Segmented:

- Indicators & Icons
- Numeric
- Starburst
- Mosaic
- SDC & SDM

LCD-MODULES:

- Character-displays
- Graphic-displays

LED:

- SMD LEDs package-type 0603 and 0805 (SpiceLED)
- PLCC2 (DomiLED)
- PLCC4 (Power DomiLED)
- half-PLCC (mini DomiLED)
- RGB PLCC (multi DomiLED)

M MICROCONTROLLER



4-BIT:

■ S1C63 Series

High-end 4-bit μ Controllers with a wide variety of peripheral circuits. All models contain LCD-drivers and up to 32k ROM on low-power basis.

16-BIT:

■ S1C17/S1C17W Series

Powerful 16-bit CPU, line-up. Integrating a wide choice of ROM and RAM sizes, image-drivers, sensor-interfaces and other high-performance peripheral circuits into a single-chip-design. Low voltage, power-saving technology.

32-BIT:

■ S1C33 Series

Application-specific series with EPSON's original 32-bit RISC-core for telecommunication, hand-terminal, mobile-computing. A large selection to Royalty-Free middleware leads to short development -times.

WORKBENCH:

- Tools and workbenches are available for all EPSON μ Controller. C-GNU-compiler for 16-bit- and 32-bit-controllers.

S SENSORIK-ICs



OPTICAL SENSORS:

- HALIOS® Gesture Switch-IC

PASSIVE INFRARED SENSOR IC:

- PIR Signal Conditioner/Controller

PRESSURE SENSORS:

- Amplified Analog & Digital
- Un-/ Compensated / Die / Package

CURRENT-SENSOR:

- Integrated AMR current sensor-IC

SMOKE DETECTOR CONTROLLER:

- for network addressable, optical smoke detectors

ULTRASONIC:

- Digital Ultrasonic Transducer Driver and Signal Processor

SENSOR SIGNAL-PROCESSOR:

- SSP for Resistive Bridges

THERMOPILE:

- Single Channel Sensor Signal Processor
- Sensor Signal and Temperature (DOC1™)

SAFETY:

- Safety Pressure Sensor with PSI5 Interface

T TOUCH



STANDARD PCT MODULES:

- 4,3" 16:9
- 5,7" 4:3
- 7,0" 16:9
- 8,4" 4:3
- 10,4" 4:3
- 12,1" 4:3
- 12,1" 16:9
- 15,0" 4:3
- 21,5" 16:9
- 24" 16:9
- Standard glass cover lenses

CONNECTION BOARDS (SDB):

- SDB-40 DI
- SDB-80 DI A
- SDB-80 DI B
- I2C Master Board

START-2-TOUCH KIT:

- 10,4" EVA-Tool on glass

CONTROLLER:

- Tango C-series
- Tango F-series

CUSTOM SPECIFIC:

- Each standard size is a project-specific consulted product.
- A custom-cut and design-in production is possible for specific requirements.
- Custom glass cover lenses

SUPPORT / SERVICE:

- Each system-integration is technically and physically supported by Channel.

OS SUPPORTED:

- Win 7
- Win XP
- Win CE 6.0
- Linux
- Others on request



Human Interfaces; Terminals; Automotive; Industrial Controls, LED General Lighting; ESL; Commercial Displays; Backlights; Medical Indicators;

Watches; Time-Catching; Temperature-Sensing; Temperature-Tag; Remote-Control; PDA; Healthcare; Home-Appliance; Mobile-Equipment;

Systems; Keyboard; Air-Condition; Ventilation; Control-Engineering; Automation; Condition-Recognition, Automotive

System Integration; Industrial Controls



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