

Building Automation Components





"We will pursue the concept of A Better Life, A Better World, meeting the needs of each individual customer."

Kazuhiro Tsuga,
President Panasonic Corp.

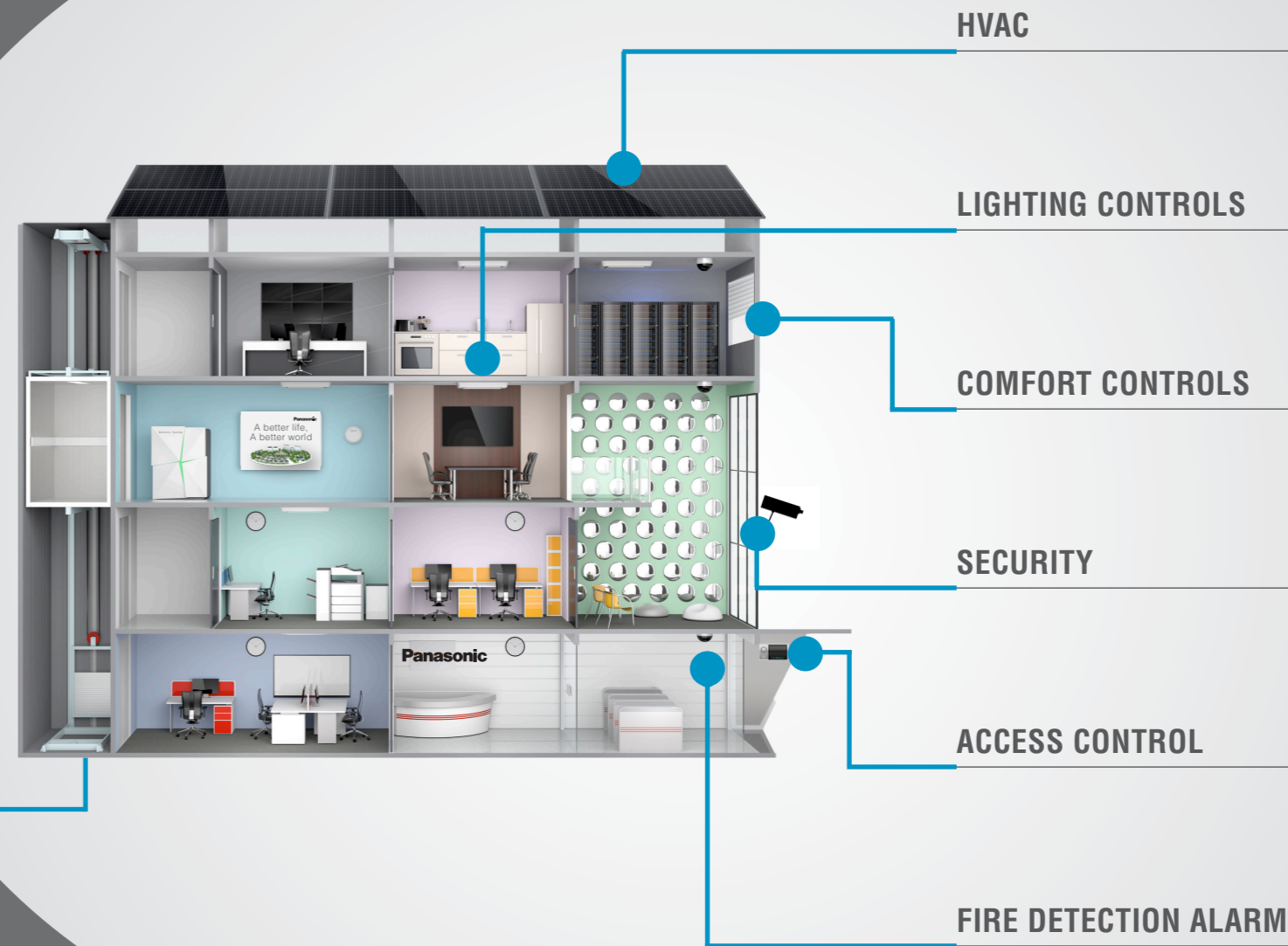
FUJISAWA SST – A TOWN SUSTAINABLY EVOLVING THROUGH LIVING IDEAS

The world is currently facing life-threatening challenges: population growth in emerging nations, depleting natural resources and increasing CO2 emissions. Hence there is a need to harvest renewable energy sources to provide sufficient electrical power.

Now we are developing Fujisawa Sustainable Smart Town (Fujisawa SST) in Fujisawa City, Kanagawa Prefecture. This joint project of both the private and public sectors involves Panasonic, other partner companies that are developing advanced smart city initiatives, and Fujisawa City itself.

Our full range of energy solutions and intelligent Panasonic components are already being used there: Relays, PhotoMOS, Connectors, Switches, PIR Sensors, Amorphous Silicon Solar Cells and Photosensors.

▶ SMART TOWN VIDEO



LIGHTING

SWITCHING

- LED drives
- Fluorescent lamp ballasts
- HID lamp ballasts
- Halogen lamp ballasts
- Incandescent lamps

SENSING

- Human motion
- Light level

CONNECTING

- LED PCBs
- Power supply PCBs

HARVESTING

- Solar energy

AMORPHOUS SILICON SOLAR CELLS

- Different voltages
- Different substrates
- Outdoor and indoor types

AM-5 / AM-7 / AM-8

Charging the battery by harvesting solar energy

AMORPHOUS PHOTOSENSORS

- High sensitivity
- For reflow soldering

AM-30

Light measurement for functions like dimming

CONNECTORS

- Board to wire connection

L2

Connect power supply to LED PCBs
Connect LED PCBs
For automated insertion

POWER

- **DE 16A:** Low height of 12.5mm
- **DW-H:** TV 8 rating (120A)
- **DSP/DK:** Low height of 10mm
- **LZ/LE:** TV-5 rating (80A)

Bistable: DE / DJ / DW-H 16A
DSP 8A / DK 10A
Monostable: LZ / LE 16A

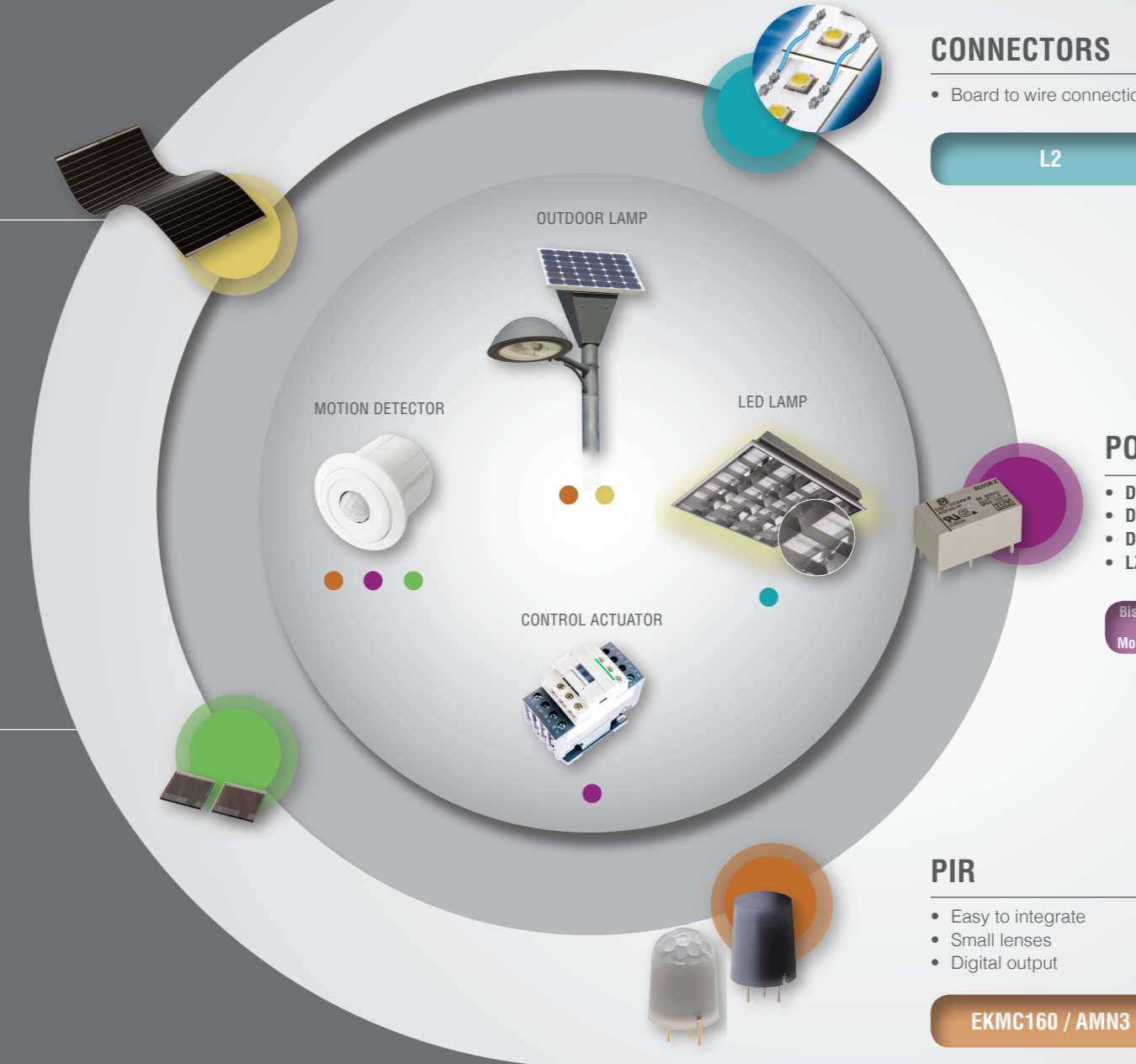
Switching lamps and various kinds of ballasts/drives

PIR

- Easy to integrate
- Small lenses
- Digital output

EKMC160 / AMN3

Human motion detection
Perfect for retrofit solutions



HVAC AND COMFORT

SWITCHING

- Valves
- Motors
- Pumps
- Dryers
- Fans
- Damper
- Control signals

SENSING

- Human motion
- End-position

CONNECTING

- Power PCBs

SSR

- Silent switching
- Zero-cross- and random-types available

APT (Triac Driver)/AQH

Triac control with APT
Switching HVAC loads with AQH

SWITCHES

- Detection switch

ASQ / ASQM / ABJ

Position control and end point detection for blinds, shutters, dampers, ventilator louvers ...

SIGNAL

- Latching type for energy saving
- Up to 3.5A (AGQ) or 7.5A TX (TH) inrush current

TX (TH) / AGQ

Switching the output of thermostat

POWER

- Economy- and latching types with a height of <10mm

Bistable: DSP 8A/DK 10A/DW 16A
Monostable: LD-P 5A/LQ 10A/LZ 16A

Switching HVAC loads like valves, pumps ...
Auxiliary switch integrated in HVAC devices

CONNECTORS

- Board to board connector
- Board to FPC connector

P4S
Y5B (W) / P5K

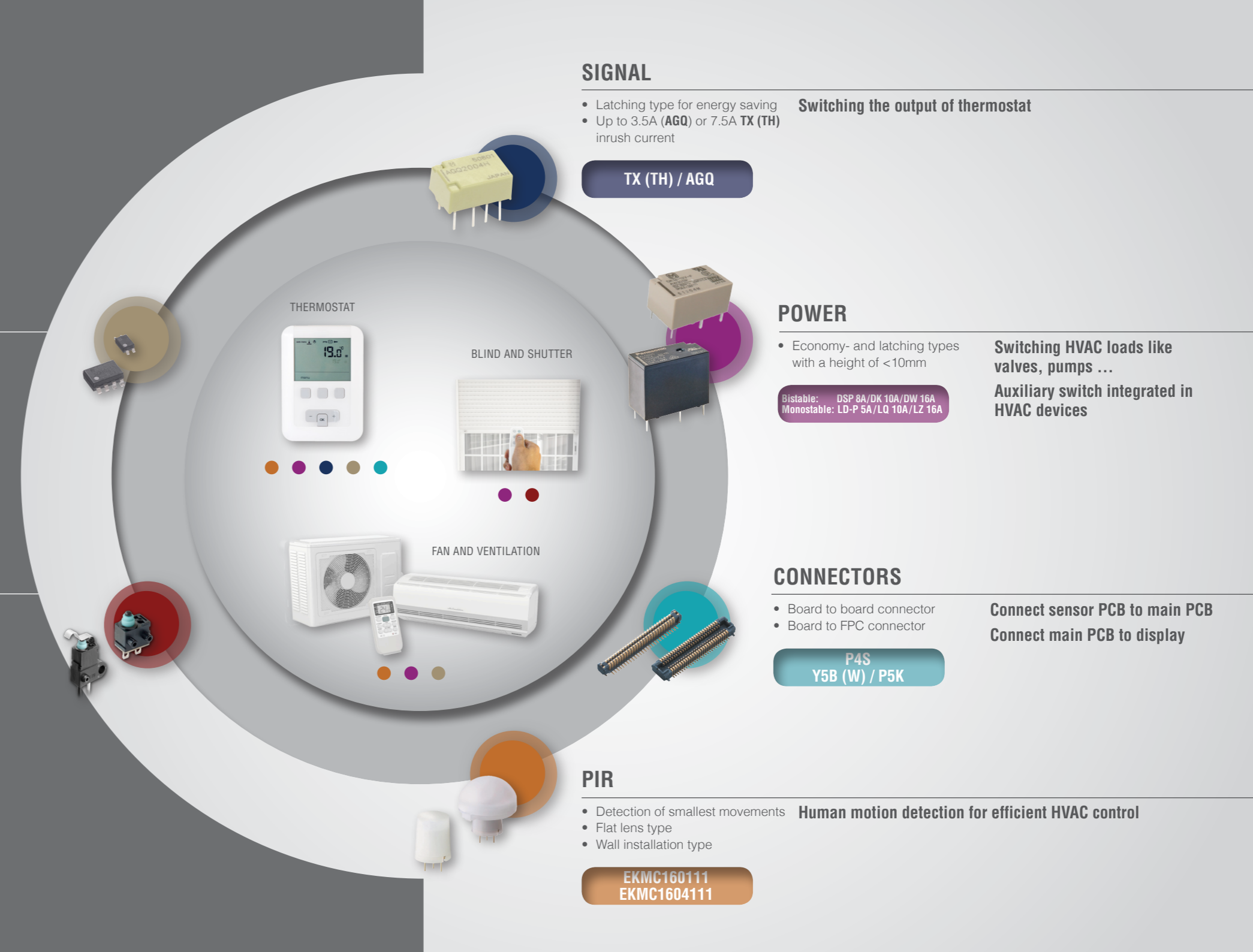
Connect sensor PCB to main PCB
Connect main PCB to display

PIR

- Detection of smallest movements
- Flat lens type
- Wall installation type

EKMC160111
EKMC1604111

Human motion detection for efficient HVAC control



SECURITY AND ACCESS

SWITCHING

- Alarm signals
- Video signals
- Sound and audio signals
- Signals to call centers
- Alarm signaling devices
- Door contacts

SENSING

- Human motion
- Mechanical operating status

CONNECTING

- Main PCB to display
- Main PCB to image sensor board
- Connecting sensors

CONNECTORS

- FPC back lock connector
- W-type with click feedback and holding contact
- Board to wire connector

Y5B (W) / P5K

Connect main PCB to display

- Board to board connector

P4S

Connect sensor PCB to main PCB

PHOTOMOS

- Low CxR (RF)
- Economy types (GU)

AQY-RF / AQY-GU

Switching video and sound signal
Switching door contact

- 1-Form-B contact
- Low control current (0.5mA)

AQY-GU

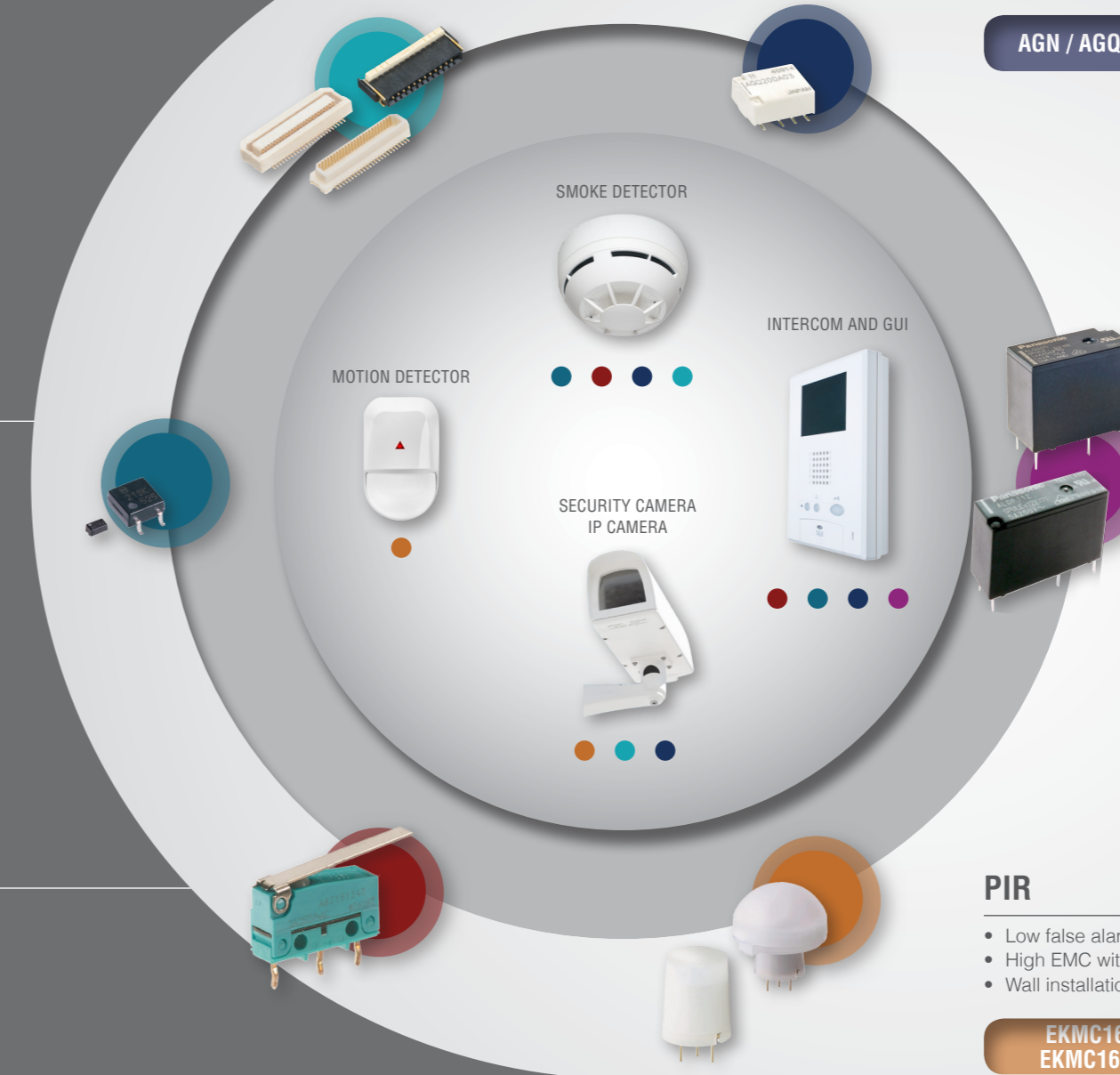
Auxiliary contact for switching alarm signaling devices
Control of lock fire doors

SWITCHES

- Detection switch

AV3 / ABS

Detect whether cover is open or closed
Detect whether battery is inserted



SIGNAL

- Small size (AGN/AGQ)
- TX can handle 10A in case of an failure

AGN / AGQ / TX / TQ

Switching video and sound signal
Switching door contact
Auxiliary relay contact for switching alarm signaling devices
Control of fire door locks

POWER

- Economy types

LD-P 5A / LQ 10A

Auxiliary relay contact for switching alarm signaling devices

PIR

- Low false alarm probability
- High EMC withstand capability
- Wall installation type

EKMC160111
EKMC1604111

Human detection for anti-burglary protection
Need-based storage of recordings
Trigger for sending a message to mobile devices

WIRELESS SYSTEMS

SWITCHING

- Smart plugs
- Smart valves
- Smart locks
- Smart alarm devices
- Smart control actuators

SENSING

- Human motion
- Light level

CONNECTING

- WIFI-board with main PCB
- Smart sensors
- Displays

HARVESTING

- Solar energy

SIGNAL

- TX (TH) for inrush current
- AGQ small bistable

TX (TH) / AGQ

Remote controlled unit,
controlling LED drivers
Perfect for retrofit solutions

PHOTOMOS

- Low control current (0.5mA)
- Short circuit protected types

AQY-GU

Auxiliary contact for switching
alarm signaling devices

AMORPHOUS SILICON SOLAR CELLS

- Different voltages
- Different substrates
- Outdoor and indoor types

AM-5 / AM-7 / AM-8

Charging the battery by
harvesting solar energy

AMORPHOUS PHOTSENSORS

- High sensitivity
- For reflow soldering

AM-30

Light measurement for
functions like dimming

CONNECTORS

- FPC connector (0.5mm pitch)
- Back-lock connector type
- Double top and bottom contacts
- W-type with click feedback and FPC holding contact

Y5B (W)

Connect main PCB to display
Connect WIFI chip to main PCB
Connect any kind of sensor

POWER

- Low energy consumption
- Low height
- Switching inrush current

Bistable: DSP 8A / DK 10A /
DW-H / DJ / DE 16A

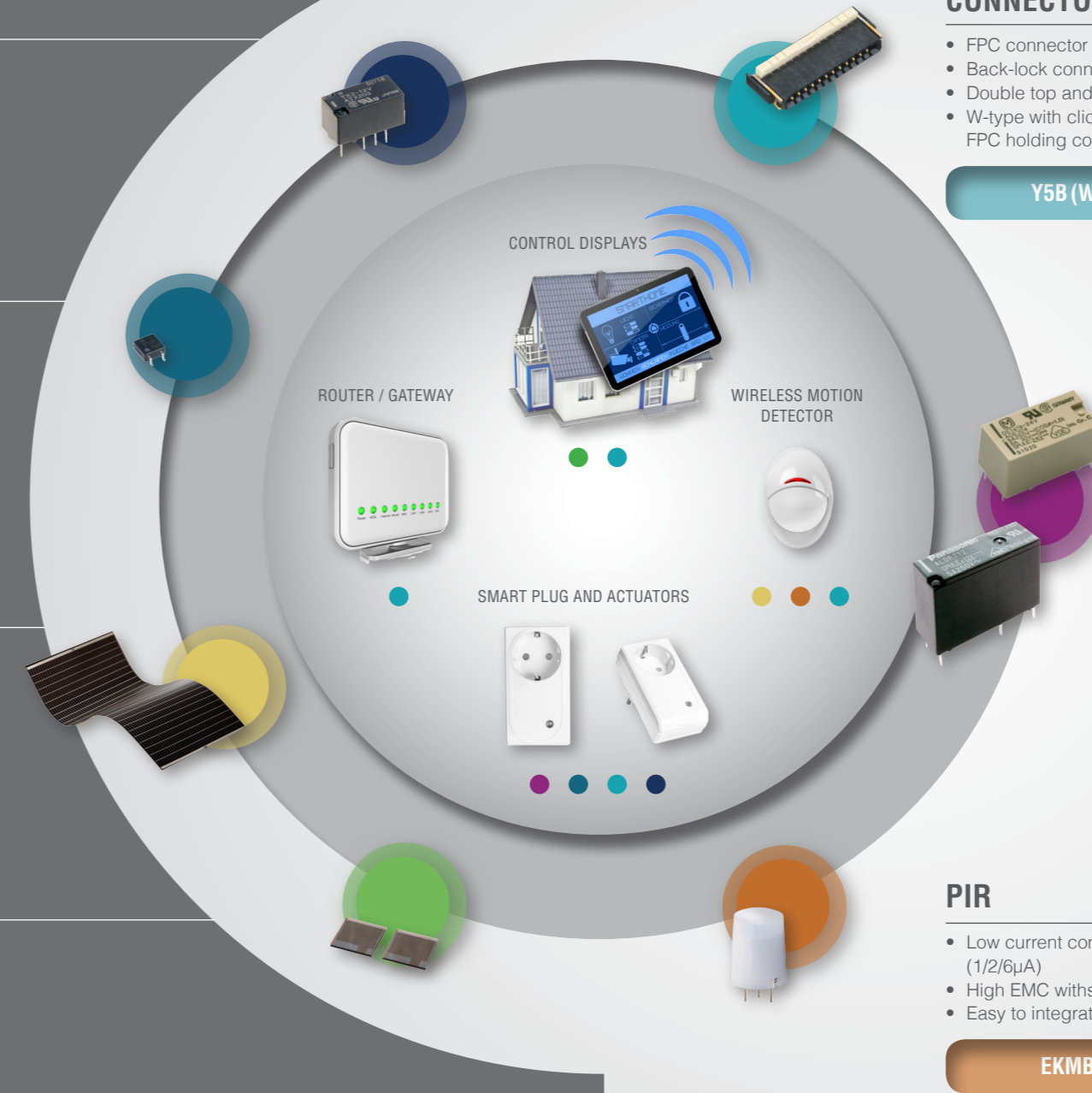
Switching various home
automation loads

PIR

- Low current consumption (1/2/6µA)
- High EMC withstand capability
- Easy to integrate

EKMB

Human motion detection



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