

# DC-BUS PLC Technology



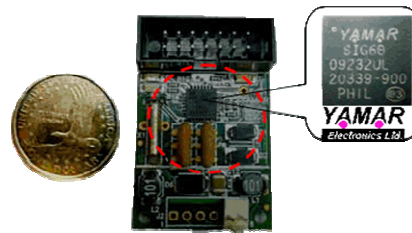
[www.yamar.com](http://www.yamar.com)

- Yair Maryanka, CEO ([yair@yamar.com](mailto:yair@yamar.com))
- Yamar Electronics Ltd,
- Privately owned SME
- Founded in 1994, located in Tel Aviv, Israel
- Specialize in Multiplex digital communication networks over noisy power-lines

# Yamar saves heavy wires

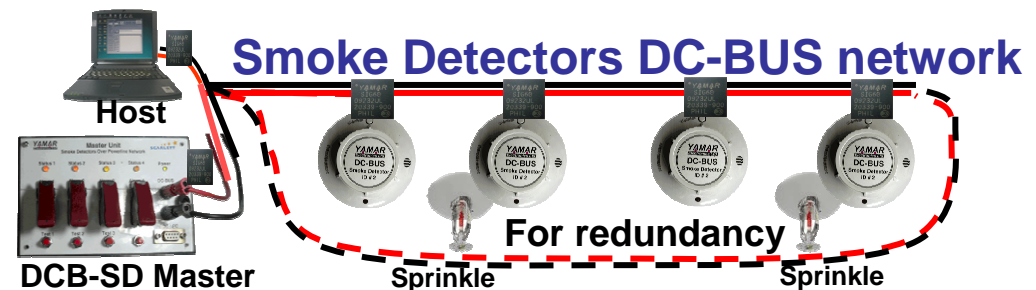


**Experts in DC-BUS Powerline Communication Technology developed for Automotive and Aerospace environments.**



- Participated in 6FP SPARC project (Daimler, Siemens,,)
- Partner in 7FP SCARLETT project (Thales, Airbus,,)

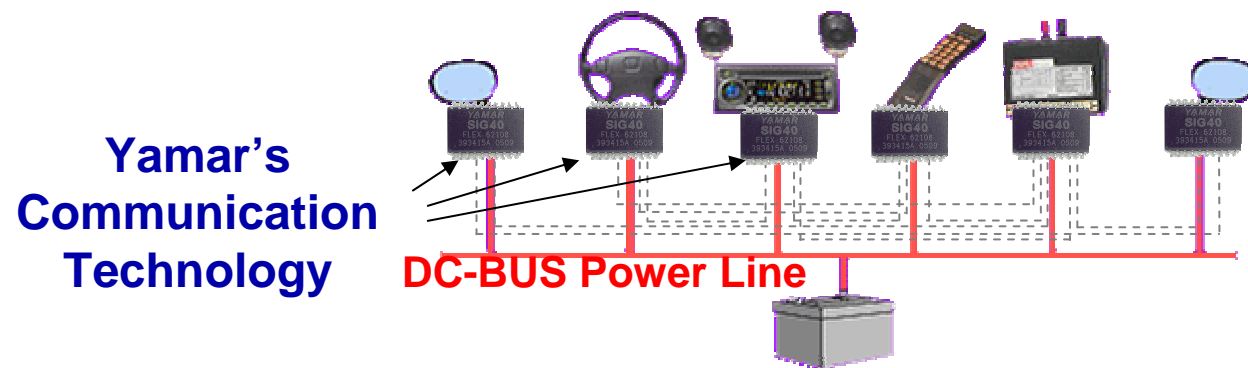
## DC-BUS in SPARC Truck-Trailer



# Benefits of the DC-BUS



- Replace costly wires with silicon
- Simple installation, only Powerline required
- Operates on wide range of battery lines (6V,24V,...300V)
- Variety of protocols (CAN, LIN, UART, SPI)
- Less wires, higher reliability
- Promotes new design concepts



# Our contribution to project

## *Automotive*



- ***GC.SST.2013-5. Configurable and adaptable truck***
  - Data link between truck, trailer and cargo over DC line.
- ***GC.SST.2013-3. Future light urban electric vehicles***
  - Control all vehicle lights and BMS via powerline, reducing harness weight
- ***GC.SST.2013-2. Next generation electric motors***
  - Communication link between motor and BMS over powerline to optimize battery/motor performance.
- ***GC.SST.2013-1. Development of on-road charging for long term EV range extension.***
  - 1Mbps powerline network between chargers and vehicles.

# Our contribution to project

## *Aeronautics*



- ***AAT.2013.4-7. Large scale demonstration of extended Distributed Modular Electronics.***
  - Link over powerline for smart sensors and Microgrid for power distribution system.
- ***AAT.2013.4-8. Seamless aeronautical networking through integration data links***
  - Modular and flexible DC-BUS communication as a redundant UART network using Yamar's devices.
- **'Clean Sky' Joint Technology Initiative**
  - Eliminate harness.



**Thank you**

**[marketing@yamar.com](mailto:marketing@yamar.com)**

