Digital Addressable Lighting Interface - DALI-2

DALI was originally the worldwide standard for lighting control communication. Now DALI-2 helps fill the gaps in the original standard, resulting in significant improvements in interoperability. DALI-2 adds new features, and introduces standardization of control devices including the recent addition of input devices, while maintaining backwards compatibility.

Nuvoton supports DALI device development and certification and supports a variety of DALI Parts libraries. With the help of us and Nuvoton regarding DALI libraries and certificates the development schedule can be reduced by 3 to 6 months. Depending on the IEC 62386 certificate there are two Nuvoton devices specifically for DALI applications, the NDA102 and NDA103. Those two slave devices can be controlled over a single-master device, for example the NUC029.

Provide DiiA Verified DALI Protocol

IEC 62386-102
IEC 62386-207(RGB LED modules)
IEC 62386-206(Conversion to DC 1-10V)
IEC 62386-209(Colour Type(Tc))

Hardware Support

Master MCU: NUC029 series
102+20x control gear: NDA102 series
103+30x control gear: NDA103 series
Provide Schematic, Gerber file

Features

Compiles with DALI certification
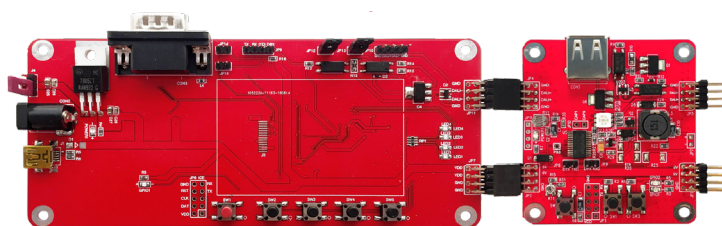Supports DALI ProbitLab2 test verification
Upgrades and maintains libraries by Nuvoton

Software Support

Support Source code of Master
Support library code of Control gear
DALI test verification guide

NUC029 Series (DALI Master)	NDA102/3 Series (IEC 20x/30x Control Device)
Cortex® M0 72 MHz	Cortex® M0 48 MHz
128 KB Flash / 16 KB RAM /8 KB LDROM	29.5KB Flash / 4KB RAM / 1.5KB SPROM
96-bit UID / 128-bit UCID	96-bit UID / 128-bit UCID
72 MHz PWM x 6ch	48 MHz PWM x 6ch
SPI / UART / I2C / USB	SPI / UART / I2C
Operating Temp -40˚C ~ 105˚C	Operating voltage 2.1V~5.5V
Operating Temp 2.5V~5.5V	Operating Temp -40˚C ~ 105˚C

Design-in Expertise and Service