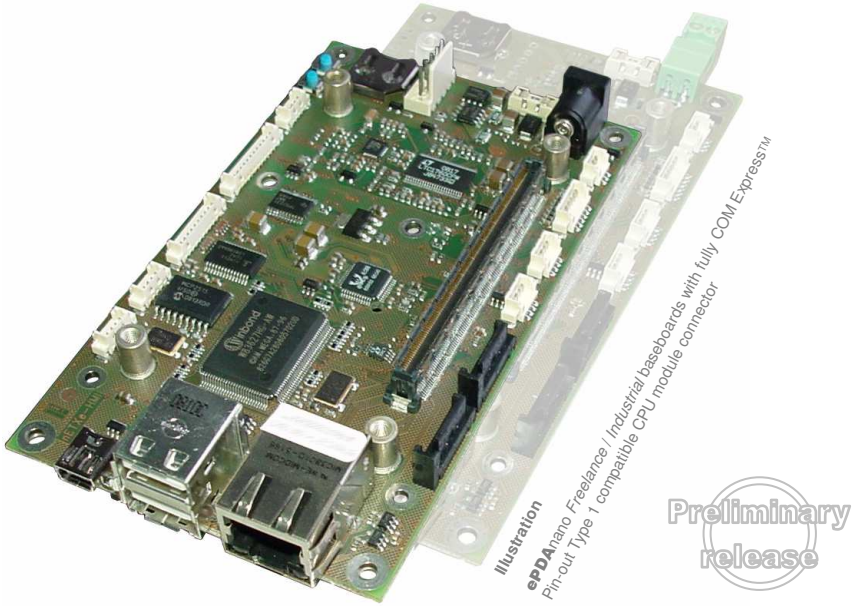
b - plus

ePDA nano

nanoETXexpress® open frame PDA Module



Platform overview

CPU	Up to 1,6 GHz Intel® Atom™ Z530
Memory	Up to 1 GB RAM Up to 4 GB Flash
Graphics	QVGA-WXGA LVDS HDTV/HD capable
I/O	GBit LAN, SATA, USB 2.0, CAN, ...

ePDA Series
XScale® / x86 open frame PDA Modules

COM Express

Windows® Embedded Partner

The ePDAnano is the *flexible* open frame platform for mobile, space-limited and industrial embedded computing applications

- Scalable CPU performance classes with large onboard RAM/Flash & microSD
- Low power with newest x86 CPU chips (e.g. Intel® Atom™) @ small footprint
- Optimal power/performance ratio for mobile and fanless operation
- Expansion via ExpressCard slot for e.g. WLAN, UMTS, GPS, data acquisition etc.
- Customer specific baseboard versions & software on request

Product overview

Preliminary release

This open frame solution is a ready to use design platform for various embedded computing applications in miscellaneous areas, for example in POS/POI terminals, industrial automation or mobile devices. It drives displays in different sizes and resolutions. The dedicated COM Express™ Type 1 baseboard is offering I/O functionality by carrying a standard x86 CPU module with integrated RAM/Flash and graphics utilizing Windows® operating systems (e.g. XP/XPe/CE) or Linux.

Key features are the possibility of choosing the optimal **ePDA**nano board out of 4 standard feature set versions as well as an ideal Performance/Watt ratio due to i.e. the newest low power 45nm Atom™ CPUs from Intel®. Further I/O functionality, i.e. WLAN/WiFi, etc. can be optionally added. The kit in its compact dimensions can be mounted with a display frame or easily integrated in a standard or custom housing. **ePDA**nano also can be customized for your application!

nano

ePDAnano boards	*Economic*	*Industrial*	*Expansion*	*Freelance*
Common features (*) depending on the CPU module	4x USB 2.0 Host, 1x USB 2.0 Client, 2x SATA (*), 1x Gigabit Ethernet, 1x RS232, 1x RS485, 8 bit GPIO, LVDS (JILI), CRT (*), microSD slot			
Additional features	common features only	1x CAN	1x CAN, HD audio, ExpressCard 34/54 slot	
Single power supply (backup battery onboard for RTC)	12V DC	24V DC (industrial power connector), AT mode	12V DC	12V DC with SmartBattery system onboard
General information	Baseboard dimensions: ca. 120 x 70mm / Mounting dimensions: ca. 115 x 70 x 34mm (max) Power consumption (baseboard without CPU module and periphery): ~ 2 W (12V) Temperature range: typical 0 – 60 °C operating temperature (extended temperature range: upon request)			

ePDA CPU modules	**nanoETXexpress®-SP**
CPU	Intel® Atom™ Z5XX Series 1,1 GHz / 1,6 GHz
RAM / Flash	Up to 1 GB onboard / Up to 4 GB SSD
Graphics	HDTV/HD Intel® graphics (single ch. LVDS 18/24 bit, WXGA 1366x768)
Power consumption	Typ. ~ 6 W idle (12V)

Illustration:
credit card size of nanoETXexpress®-SP module

ePDA accessories

Illustration:
nanoETXexpress®-SP module

Illustration:
JILI30TB TFT driver

Illustration:
nanoETXe-HMI Starterkit

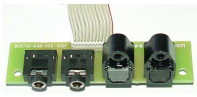


Illustration:
HDA (HD audio) adapter

Illustration:
ePDA basic cable set

Illustration:
ADA-LVDS-DVI

Ordering information

ePDAnano baseboards	Part-no.	Description
ePDAnano *Economic*	B08002-ETX-000-0204	common feature set, 12V
ePDAnano *Industrial*	B08002-ETX-000-1004	common feature set, 1x CAN, 24V, industrial power plug, AT mode
ePDAnano *Expansion*	B08002-ETX-000-0104	common feature set, 12V, 1x CAN, HD audio, ExpressCard slot
ePDAnano *Freelance*	B08002-ETX-000-0004	common feature set, 12V, 1x CAN, HD audio, ExpressCard slot, SmartBattery
ePDAnano CPU modules	Part-no.	Description
nanoETXexpress-SP NoL	34001-5151-11-0	Intel® Atom™ 1,1 GHz, 512 MB DDR2 SDRAM, 512 MB onboard Flash, without LAN
nanoETXexpress-SP 512/512	34001-5151-11-1	Intel® Atom™ 1,1 GHz, 512 MB DDR2 SDRAM, 512 MB onboard Flash, GBit LAN
nanoETXexpress-SP 512/2GB	34001-5120-16-1	Intel® Atom™ 1,6 GHz, 512 MB DDR2 SDRAM, 2 GB onboard Flash, GBit LAN
nanoETXexpress-SP 1GB/4GB	34001-1040-16-1	Intel® Atom™ 1,6 GHz, 1 GB DDR2 SDRAM, 4 GB onboard Flash, GBit LAN
ePDAnano accessories	Part-no.	Description
nETXexpress-HMI starterkit	34100-0000-00-S	incl. **ePDA**nano *Freelance* baseboard, 7“ touch TFT, power supply, cables
ePDA basic cable set	K08702-KAB-000-0001	with cable connectors for RS232, USB Host, RS485 (others upon request)
HDA audio adapter	K08700-KAB-001-0101	HD audio adapter board for **ePDA**nano (*Expansion*, *Freelance* only)
JILI30TB adapter	B08701-KAB-001-0001	JILI adapter with touch & backlight for LVDS TFT display connection, incl. cable set
ADA-LVDS-DVI	96007-0000-00-1	adaptor to connect from LVDS (JILI) to DVI, including the flatfoil cable

For complete ordering information & up-to-date news see http://www.b-plus.com/de/produkte/epda-nano.html

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