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TCE Tinycore Linux Project englisch

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Version vom 21. Juli 2013, 12:12 Uhr (Quelle anzeigen)

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Aktuelle Version vom 8. Januar 2023, 15:01 Uhr (Quelle anzeigen)

[OE2WAO](#) ([Diskussion](#) | [Beiträge](#))

Markierung: [Visuelle Bearbeitung](#)

(10 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:

==Intro==

[[Bild:PPC.jpg|thumb|500MHz LowPower industrial PC]]

This hamradio software project is based on [http://www.tinycorelinux.com TCE - Tinycore Linux], an embedded software system used on plattformen like industrial pc, ALIX and others, and offers **services and possibilities like**

– ***packet radio,**

– ***APRS,**

– ***lightning log,**

– ***small webserver,**

– ***SVX-Link (Echolink)**

Zeile 1:

[[Datei:Deutschland-flagge.gif]] Für die deutsche Version dieses Projekts [[TCE Tinycore Linux Projekt | >>hier klicken<<]]

==Intro==

[[Bild:PPC.jpg|thumb|500MHz LowPower industrial PC]]

This hamradio software project is based on [http://www.tinycorelinux.com TCE - Tinycore Linux], an embedded software system used on plattformen like industrial pc, ALIX and others, and offers

*** Packet Radio - (multichannel /multibaud e.g. 1k2 2k4 4k8 9k6..)**

***APRS - UDPGATE (IGATE, also multibaud, e.g. 1k2 and 9k6)**

***LoRa APRS (NEW!) incl. Mic-E**

***SAMNET**

***lightning detection**

***Radiosondes RX (weather balloon tracker)**

***small web servers**

***Weather station with different sensors**

	+	*SVX Link (Echolink)
	+	*WINLINK Global Radio Email (RMS Packet)
	+	*Switching and measuring center
	+	
especialy in networks like HAMNET and similar. 		especialy in networks like HAMNET and similar.
One goal is a minimum on material expenditure and also a minimal current consumption, followed by a maximum of features		One goal is a minimum on material expenditure and also a minimal current consumption, followed by a maximum of features
More information on the hamradio TCE - tinycore linux project coming here soon		More information on the hamradio TCE - tinycore linux project coming here soon
-		
==Hardware==		==Hardware==
[[Bild:12v-anschluss.jpg thumb polarity industrial PC]]		[[Bild:12v-anschluss.jpg thumb polarity industrial PC]]
- DH2IW Wolfgang, OE2WAO Mike and OE5DXL Chris are doing first experiments with discarded industrial pc hardware, a 500MHz AMD Geode CPU with up to 256MB of RAM, and a minimal power input of <5Watt (for remaining stock ask [http://www.oe2wao.info OE2WAO]). 	+	DH2IW Wolfgang, OE2WAO Mike and OE5DXL Chris are doing experiments with discarded industrial pc hardware, a 500MHz AMD Geode CPU with up to 256MB of RAM, and a minimal power input of <5Watt (for remaining stock ask [http://www.oe2wao.info OE2WAO]).
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- The operating system is placed on a CF memory card (>32MB). 	+	The operating system is placed on a CF/ SD memory card (>32MB).
		If available the internal, or in other cases an USB soundcard is used for opera ting AFSK/ FSK modulation . One special

- **A** USB soundcard is used for AFSK **mods**. One special character of working devices is a 3rd connector beside microphone and line out, the line in. Because these device are real stereo and make it possible to operate two separate channels on one sound card.

- + character of working devices is a 3rd connector beside microphone and line out, the line in. Because these device are real stereo and make it possible to operate two separate channels **even** on one sound card.

- ===Connections and conversion of **the** used industrial **pc**===

- + ===Connections and conversion of **our** used industrial **PC**===

[[Bild:12v-umbau.jpg|thumb|power supply conversion 12V]]

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There are several connectors (COM, USB, network) on the frontside of our panels, as you can see. For correct polarity it is important to connent the + pole to the right pin of the 3pol power supply connector, the pin which is closer to the USB ports. The negative pole is the left pin.

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Zeile 33:

Zeile 41:

==Software==

==Software==

- A ready-to-use software image is located on the [http://www.oe2wao.info/tce OE2WAO Server] (e.g. tc455x-128.zip means version 4.55 with GUI on 128MB data drive)

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- + **There is also a version for raspberry pi hardware in test, and available soon.**

+

- + **DL1NUX has created a wiki on installation and operating the dxlToolchain <http://dxlwiki.dl1nux.de/> (german)**

- + **===Software schematic===**

- + **[[Datei:Udpboxs.jpg]]**

==Help==

-

If you need help on configuring the software packages you can contact OE5DXL on packet radio convers channel **4 or 4711.**

==Help==

+

If you need help on configuring the software packages you can contact OE5DXL on packet radio convers channel **501.**

Aktuelle Version vom 8. Januar 2023, 15:01 Uhr



Für die deutsche Version dieses Projekts [>>hier klicken<<](#)

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3.1	Software schematic	7
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Intro

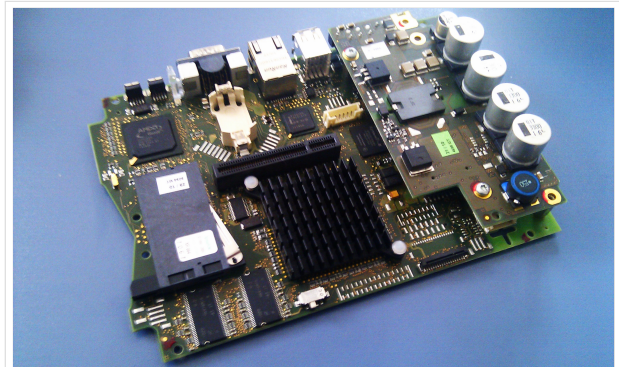
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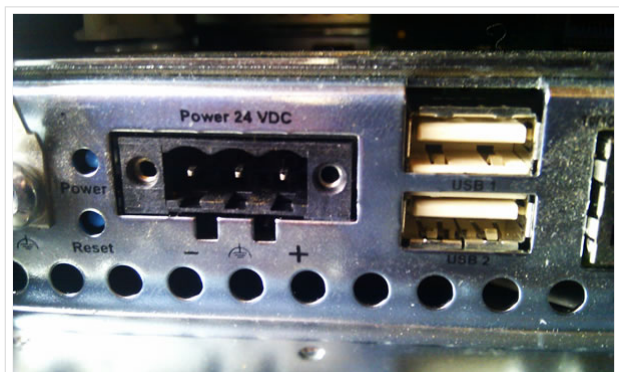
500MHz LowPower industrial PC

Hardware

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polarity industrial PC

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Connections and conversion of our used industrial PC

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The normal board supply is 24V. That we can use it with our 12V power supply, we have to do a little modification. Just add a 270k Ohm resistor on the bottom side of the power supply as shown in the picture.



Soundcard

If there is no onboard sound available, you can use a USB soundcard instead. Suggested types you can find [here](#).

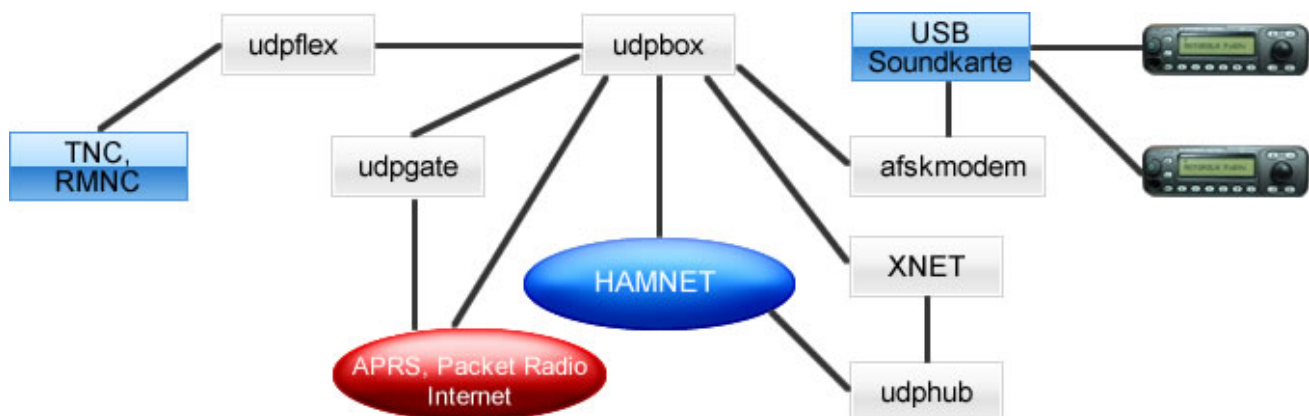
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Software schematic



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