Inhaltsverzeichnis

TCE Tinycore Linux Project englisch

Versionsgeschichte interaktiv durchsuchen
VisuellWikitext

Version vom 21. Juli 2013, 11:12 Uhr (Quelltext anzeigen) OE2WAO (Diskussion | Beiträge) K (→Hardware) ← Zum vorherigen Versionsunterschied	**Version vom 19. August 2021, 08:45 Uhr (Quelltext anzeigen)** OE2WAO (Diskussion | Beiträge) K (→Intro) Markierung: Visuelle Bearbeitung Zum nächsten Versionsunterschied →

(8 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

	Zeile 1:		**Zeile 1:**
		+	**[[Datei:Deutschland-flagge.gif]] Für die deutsche Version dieses Projekts [[TCE Tinycore_Linux_Projekt | >>hier klicken<<]]**
	==Intro==		==Intro==
	[[Bild:PPC.jpg|thumb|500MHz LowPower industrial PC]]		[[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 plattforms like industrial pc, ALIX and others, and offers services and possibilities like	+	This hamradio software project is based on [http://www.tinycorelinux.com TCE - Tinycore Linux], an embedded software system used on plattforms like industrial pc, ALIX and others, and offers
−	*'''packet radio''',	+	
−	*APRS,	+	'''* multimode'''
		+	'''* multibaud'''
		+	'''* multichannel'''
		+	
		+	services and possibilities like
		+	
		+	'''*Packet Radio,'''
		+	*'''BBS''',
		+	*APRS**,**
		+	'''*Radiosonde tracker''',

*lightning log,	*lightning log,
*small webserver,	*small webserver,
*SVX-Link (Echolink)	*SVX-Link (Echolink)
	+
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==

Zeile 17: **Zeile 27:**

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 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]).
− But every other hardware plattform like ALIX or similar will do. 	+ But every other hardware plattform like ALIX**, Raspberry Pi** or similar will do.
The operating system is placed on a CF memory card (>32MB). 	The operating system is placed on a CF memory card (>32MB).
− 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.	+ A USB soundcard is used for **operating** AF SK/**FSK modulation**. 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.

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

Zeile 33: **Zeile 43:**

==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)	+ 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)** **
	+ **There is also a version for raspberry pi hardware in test, and available soon.**
	+ **===Software schematic===**
	+ **[[Datei:Udpboxs.jpg]]**
==Help==	==Help==
− If you need help on configuring the software packages you can contact OE5DXL on packet radio convers channel **4 4 or 4711**.	+ If you need help on configuring the software packages you can contact OE5DXL on packet radio convers channel **5 01**.

Version vom 19. August 2021, 08:45 Uhr


Für die deutsche Version dieses Projekts >>hier klicken<<

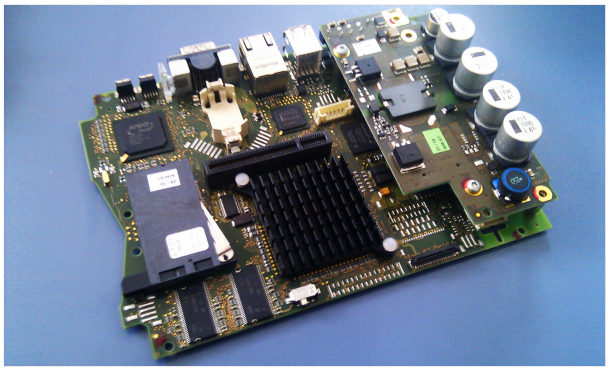
Inhaltsverzeichnis

1 Intro 5
2 Hardware 5
2.1 Connections and conversion of the used industrial pc 5
2.2 Soundcard 6
3 Software 6
3.1 Software schematic 6
4 Help 6

Intro

This hamradio software project is based on TCE - Tinycore Linux, an embedded software system used on plattforms like industrial pc, ALIX and others, and offers

- multimode
- multibaud
- multichannel



500MHz LowPower industrial PC

services and possibilities like

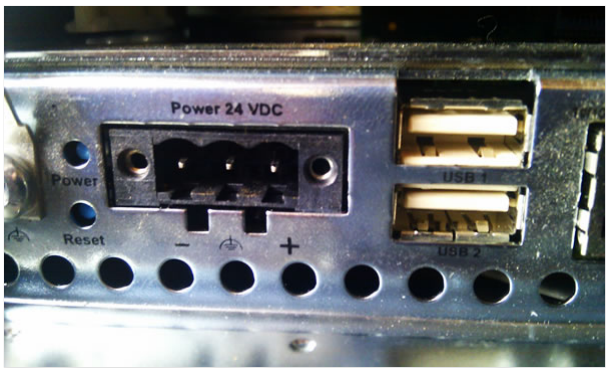
- Packet Radio,
- BBS,
- APRS,
- Radiosonde tracker,
- lightning log,
- small webserver,
- SVX-Link (Echolink)

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

More information on the hamradio TCE - tinycore linux project coming here soon

Hardware

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 OE2WAO).



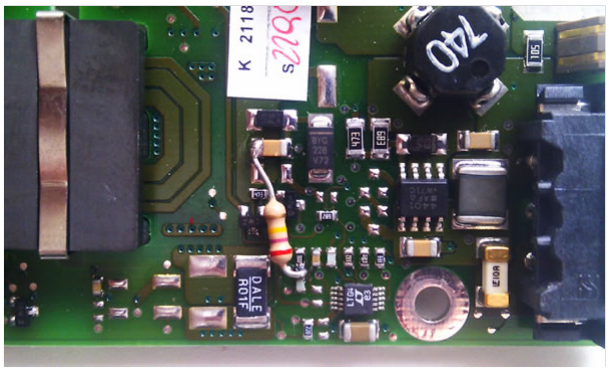
polarity industrial PC

But every other hardware plattform like ALIX, Raspberry Pi or similar will do.
The operating system is placed on a CF memory card (>32MB).

A USB soundcard is used for operating AFSK /FSK modulation. 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.

Connections and conversion of the used industrial pc

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.



power supply conversion 12V

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.

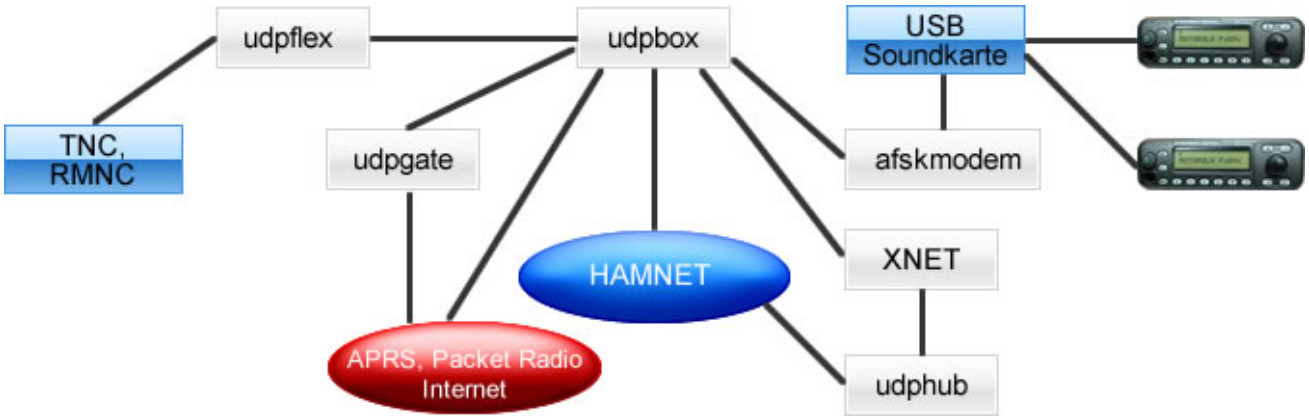
Soundcard

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

Software

A ready-to-use software image is located on the OE2WAO Server (e.g. tc455x-128.zip means version 4.55 with GUI on 128MB data drive)
There is also a version for raspberry pi hardware in test, and available soon.

Software schematic



Help

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