

Inhaltsverzeichnis

1. TCE Tinycore Linux Project englisch	20
2. Benutzer:OE2WAO	8
3. Geeignete Soundkarten	14
4. TCE Tinycore Linux Projekt	26

TCE Tinycore Linux Project englisch

[Versionsgeschichte interaktiv durchsuchen](#)

[Visuell Wikitext](#)

Version vom 11. Juli 2012, 11:11 Uhr (Quelltext anzeigen)

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

[← Zum vorherigen Versionsunterschied](#)

Version vom 19. August 2021, 09:45 Uhr (Quelltext anzeigen)

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

[K](#) ([→Intro](#))

Markierung: [Visuelle Bearbeitung](#)

[Zum nächsten Versionsunterschied →](#)

(15 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:	Zeile 1:
==Einleitung==	[[Datei:Deutschland-flagge.gif]] Für die deutsche Version dieses Projekts [[TCE Tinycore Linux Projekt >>hier klicken<<]]
[[Bild:PPC.jpg thumb 500MHz LowPower Industrie PC]]	==Intro==
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	[[Bild:PPC.jpg thumb 500MHz LowPower industrial PC]]
*Packet Radio,	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
*APRS,	
	* multimode
	* multibaud
	* multichannel
	services and possibilities like
	*Packet Radio,
	*BBS,

*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

Zeile 12:

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

+ *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

Zeile 23:

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

+ ==**Hardware**==

+ [[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]).
**

+

+ **But every other hardware platform 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===

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

+ There are several connectors (COM, USB, network) on the frontside of our panels, as you can see. For correct polarity it is important to connect 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.

+

+ 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 [[Geeignete Soundkarten|here]].

+

+ ===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)

Version vom 19. August 2021, 09:45 Uhr



1	Intro	24
2	Hardware	24
2.1	Connections and conversion of the used industrial pc	24
2.2	Soundcard	25
3	Software	25
3.1	Software schematic	25
4	Help	25

Intro

This hamradio software project is based on [TCE - Tinycore Linux](#), an embedded software system used on platforms like industrial pc, ALIX and others, and offers

- multimode
- multibaud
- multichannel

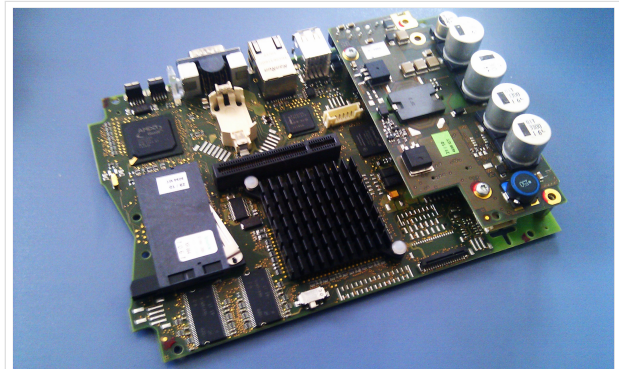
services and possibilities like

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

especially 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



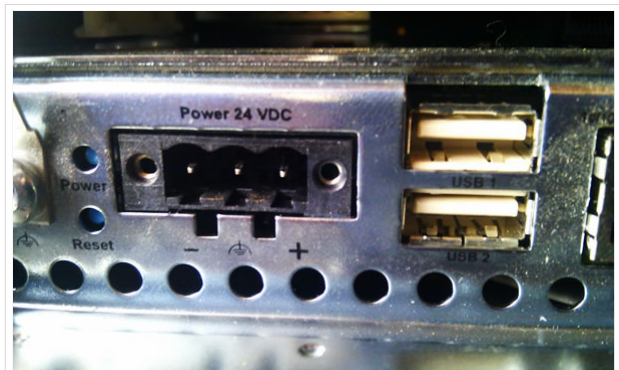
500MHz LowPower industrial PC

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](#)).

But every other hardware platform like ALIX, Raspberry Pi or similar will do.

The operating system is placed on a CF memory card (>32MB).



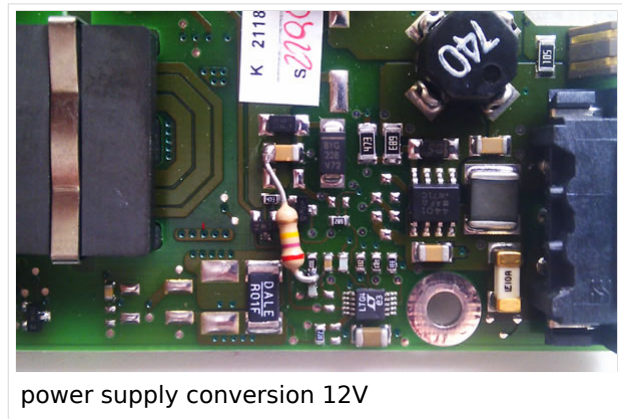
polarity industrial PC

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 connect 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.

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

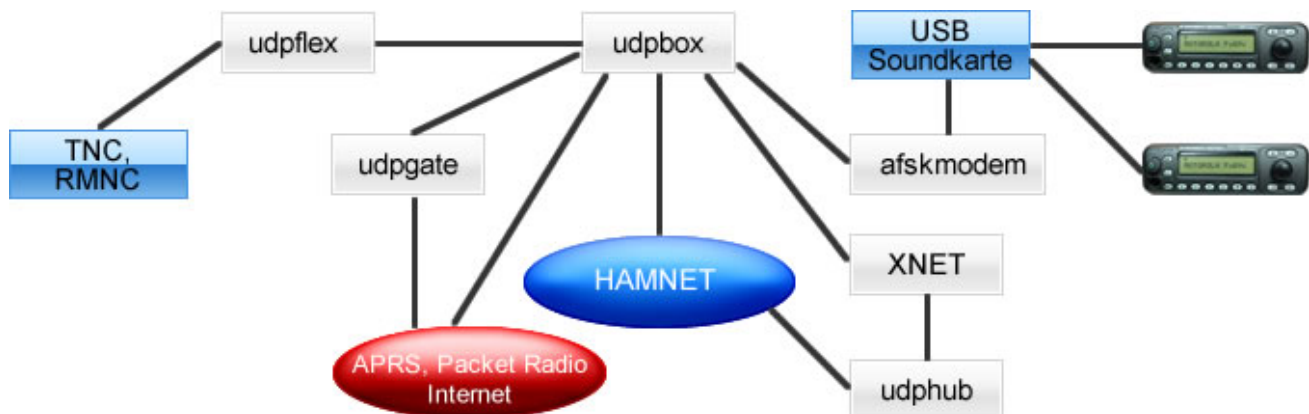
If there is no onboard sound available, you can use a USB soundcard instead. Suggested types you can find [here](#).

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.

TCE Tinycore Linux Project englisch: Unterschied zwischen den Versionen

Versionsgeschichte interaktiv durchsuchen

VisuellWikitext

Version vom 11. Juli 2012, 11:11 Uhr (Quelltext anzeigen)

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

← Zum vorherigen Versionsunterschied

Version vom 19. August 2021, 09:45 Uhr (Quelltext anzeigen)

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

K (→Intro)

Markierung: [Visuelle Bearbeitung](#)

Zum nächsten Versionsunterschied →

(15 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:

– **==Einleitung==**

– **[[Bild:PPC.jpg|thumb|500MHz LowPower Industrie 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,

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

+

+ *** multimode**

+ *** multibaud**

+ *** multichannel**

+

+ services and possibilities like

+

+ *Packet Radio,

*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

Zeile 12:

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

+

***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

Zeile 23:

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

+

==Hardware==

+

[[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])).
**

+

+

**But every other hardware platform 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===**

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

+ **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.
**

+

+ **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 [[Geeignete Soundkarten|here]].**

+

+ **==Software==**

+ If you need help on configuring the software packages you can contact **OE5DX** **L** on packet radio convers channel **501**.

Seite 11 von 31

Intro

This hamradio software project is based on [TCE - Tinycore Linux](#), an embedded software system used on platforms like industrial pc, ALIX and others, and offers

- multimode
- multibaud
- multichannel

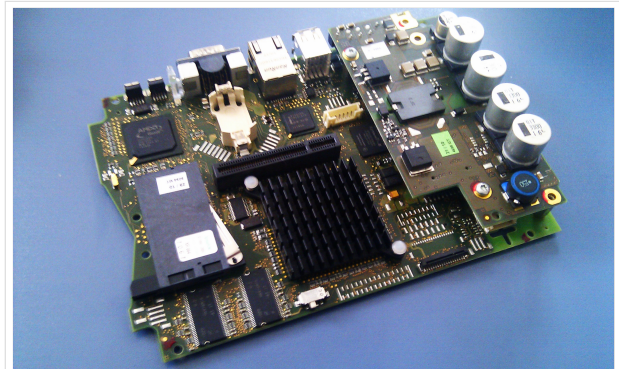
services and possibilities like

- 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



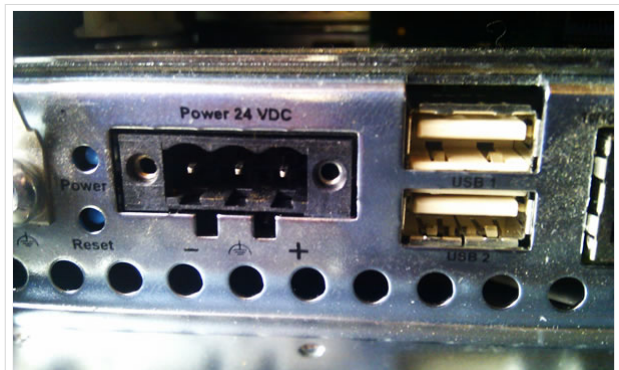
500MHz LowPower industrial PC

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](#)).

But every other hardware platform like ALIX, Raspberry Pi or similar will do.

The operating system is placed on a CF memory card (>32MB).



polarity industrial PC

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 connect 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.

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

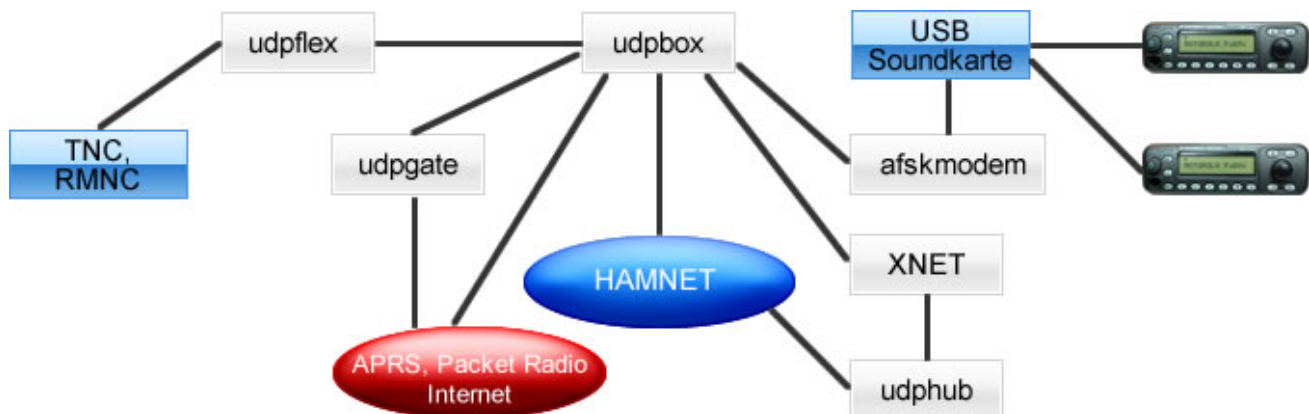
If there is no onboard sound available, you can use a USB soundcard instead. Suggested types you can find [here](#).

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.

TCE Tinycore Linux Project englisch: Unterschied zwischen den Versionen

Versionsgeschichte interaktiv durchsuchen

VisuellWikitext

Version vom 11. Juli 2012, 11:11 Uhr (Quelltext anzeigen)

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

← Zum vorherigen Versionsunterschied

Version vom 19. August 2021, 09:45 Uhr (Quelltext anzeigen)

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

K (→Intro)

Markierung: [Visuelle Bearbeitung](#)

Zum nächsten Versionsunterschied →

(15 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:

– **==Einleitung==**

– **[[Bild:PPC.jpg|thumb|500MHz LowPower Industrie 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,

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

+

+ *** multimode**

+ *** multibaud**

+ *** multichannel**

+

+ services and possibilities like

+

+ *Packet Radio,

*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

Zeile 12:

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

+

***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

Zeile 23:

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

+

==Hardware==

+

[[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])).
**

+

+

**But every other hardware platform 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===**

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

+ **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.
**

+

+ **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 [[Geeignete Soundkarten|here]].**

+

+ **==Software==**

==Help==

If you need help on configuring the software packages you can contact **us** on packet radio convers channel **44**.

+

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==

If you need help on configuring the software packages you can contact **OE5DX L** on packet radio convers channel **501**.

Version vom 19. August 2021, 09:45 Uhr



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

Inhaltsverzeichnis

1	Intro	18
2	Hardware	18
2.1	Connections and conversion of the used industrial pc	18
2.2	Soundcard	19
3	Software	19
3.1	Software schematic	19
4	Help	19

Intro

This hamradio software project is based on [TCE - Tinycore Linux](#), an embedded software system used on platforms like industrial pc, ALIX and others, and offers

- multimode
- multibaud
- multichannel

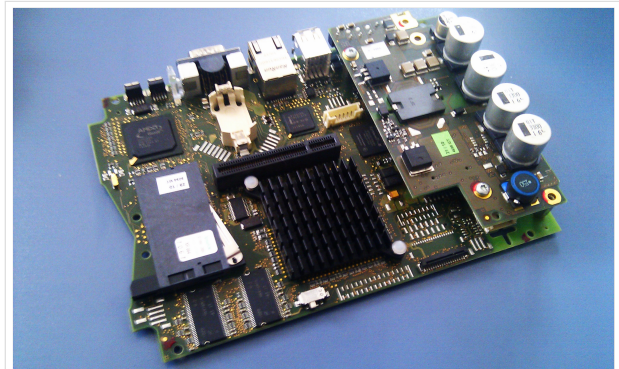
services and possibilities like

- 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



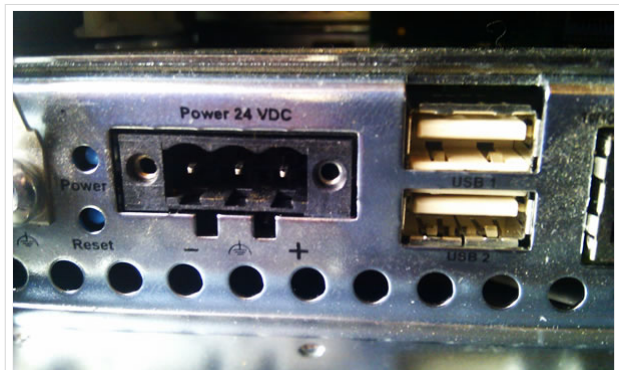
500MHz LowPower industrial PC

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](#)).

But every other hardware platform like ALIX, Raspberry Pi or similar will do.

The operating system is placed on a CF memory card (>32MB).



polarity industrial PC

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 connect 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.

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

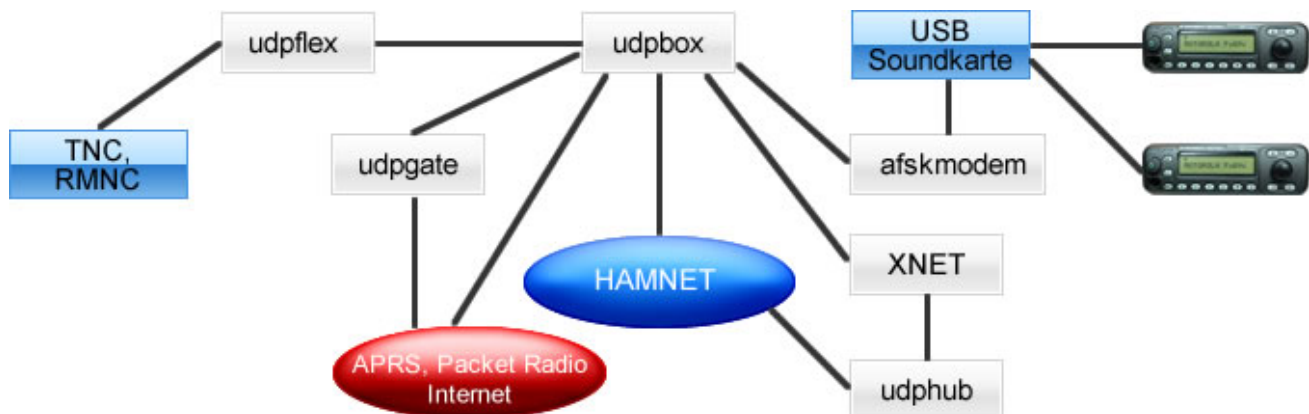
If there is no onboard sound available, you can use a USB soundcard instead. Suggested types you can find [here](#).

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.

TCE Tinycore Linux Project englisch: Unterschied zwischen den Versionen

Versionsgeschichte interaktiv durchsuchen

VisuellWikitext

Version vom 11. Juli 2012, 11:11 Uhr (Quelltext anzeigen)

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

← Zum vorherigen Versionsunterschied

Version vom 19. August 2021, 09:45 Uhr (Quelltext anzeigen)

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

K (→Intro)

Markierung: [Visuelle Bearbeitung](#)

Zum nächsten Versionsunterschied →

(15 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:

– **==Einleitung==**

– **[[Bild:PPC.jpg|thumb|500MHz LowPower Industrie 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,

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

+

+ *** multimode**

+ *** multibaud**

+ *** multichannel**

+

+ services and possibilities like

+

+ *Packet Radio,

*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

Zeile 12:

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

+

***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

Zeile 23:

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

+

==Hardware==

+

[[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])).
**

+

+

**But every other hardware platform 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===**

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

+ **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.
**

+

+ **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 [[Geeignete Soundkarten|here]].**

+

+ **==Software==**

==Help==

If you need help on configuring the software packages you can contact **us** on packet radio convers channel **44**.

+

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==

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

Version vom 19. August 2021, 09:45 Uhr



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

Inhaltsverzeichnis

1	Intro	24
2	Hardware	24
2.1	Connections and conversion of the used industrial pc	24
2.2	Soundcard	25
3	Software	25
3.1	Software schematic	25
4	Help	25

Intro

This hamradio software project is based on [TCE - Tinycore Linux](#), an embedded software system used on platforms like industrial pc, ALIX and others, and offers

- multimode
- multibaud
- multichannel

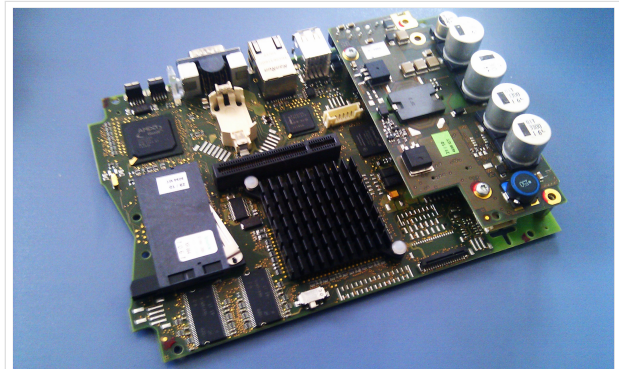
services and possibilities like

- 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



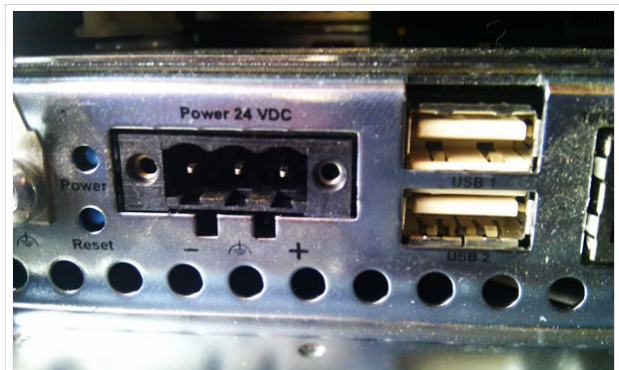
500MHz LowPower industrial PC

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](#)).

But every other hardware platform like ALIX, Raspberry Pi or similar will do.

The operating system is placed on a CF memory card (>32MB).



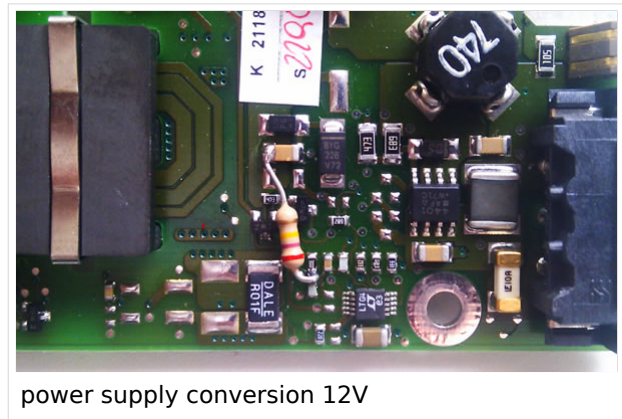
polarity industrial PC

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 connect 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.

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

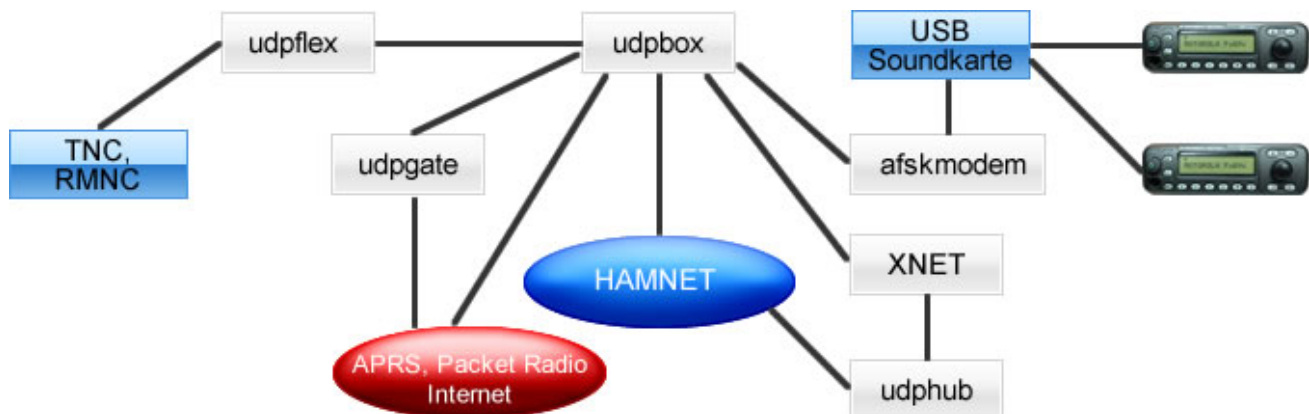
If there is no onboard sound available, you can use a USB soundcard instead. Suggested types you can find [here](#).

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.

TCE Tinycore Linux Project englisch: Unterschied zwischen den Versionen

Versionsgeschichte interaktiv durchsuchen

VisuellWikitext

Version vom 11. Juli 2012, 11:11 Uhr (Quelltext anzeigen)

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

← Zum vorherigen Versionsunterschied

Version vom 19. August 2021, 09:45 Uhr (Quelltext anzeigen)

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

K (→Intro)

Markierung: [Visuelle Bearbeitung](#)

Zum nächsten Versionsunterschied →

(15 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:

– **==Einleitung==**

– **[[Bild:PPC.jpg|thumb|500MHz LowPower Industrie 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,

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

+

+ *** multimode**

+ *** multibaud**

+ *** multichannel**

+

+ services and possibilities like

+

+ *Packet Radio,

*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

Zeile 12:

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

+

***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

Zeile 23:

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

+

==Hardware==

+

[[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]).
**

+

+

**But every other hardware platform 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===**

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

+ **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.
**

+

+ **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 [[Geeignete Soundkarten|here]].**

+

+ **==Software==**

+ If you need help on configuring the software packages you can contact **OE5DX** **L** on packet radio convers channel **501**.

Seite 29 von 31

Intro

This hamradio software project is based on [TCE - Tinycore Linux](#), an embedded software system used on platforms like industrial pc, ALIX and others, and offers

- multimode
- multibaud
- multichannel

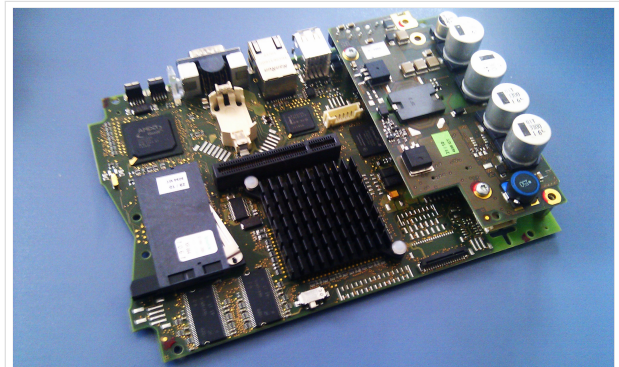
services and possibilities like

- 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



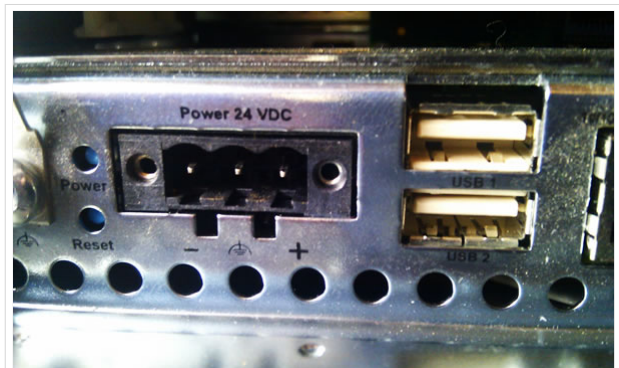
500MHz LowPower industrial PC

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](#)).

But every other hardware platform like ALIX, Raspberry Pi or similar will do.

The operating system is placed on a CF memory card (>32MB).



polarity industrial PC

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 connect 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.

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

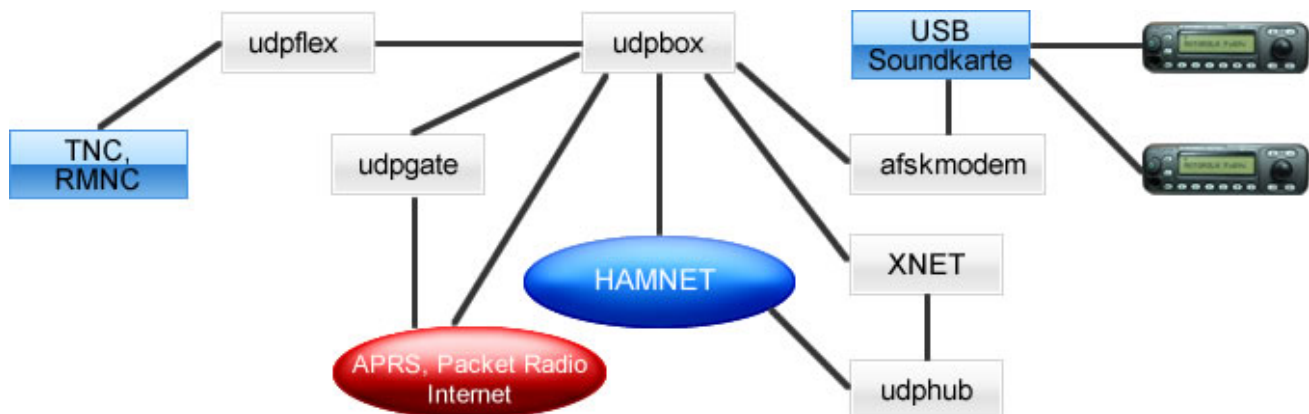
If there is no onboard sound available, you can use a USB soundcard instead. Suggested types you can find [here](#).

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.