Introduction

Brief explanation of EPROMs

Purpose of reading and writing BIN files

Prerequisites

List of required tools and materials:

* EPROM Programmer
* UV Eraser (If using UV Erase EPROM)
* Adapters for Programmer if needed
* Computer with necessary software
* BIN file
* EPROM

**Note:** for this guide we will be using a “CGecu Pro T48 USB Programmer”, these can be found on eBay and AliExpress for about AUD $70, if you are purchasing one for programming Memcals, be aware that there are plenty of counterfeit ones that will not support the high programming voltages of the 27C series EPROMS.

Section 1: Reading BIN Files from EPROMs

Step 1: Setting Up

Connect the EPROM programmer to your computer

Install necessary software and drivers

Step 2: Preparing the EPROM

Remove the EPROM chip from the device

Place the EPROM chip in the programmer socket, ensuring correct orientation

Prerequsite Setup:

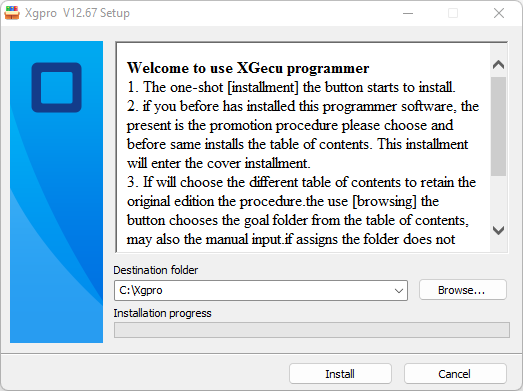
This section will guide you through setting up the “XGecu T48”

Download the latest software from the manufacturers website

<http://www.xgecu.com/EN/download.html>

This software is packaged in a .rar archive, so you will need an application like WinRAR to extract it, (Microsoft is releasing .RAR support in a Windows Update in the near future)

XGpro Software Installation



Once this step complets, it wil install the drivers for the programmer

A screenshot of a software wizard

Description automatically generated

A screenshot of a computer

Description automatically generated

Preparing the BIN file

What is Bin Stacking

EPROM bin stacking is a technique used when you want or need to use a larger EPROM (like a 256k EPROM) to replace a smaller one (like a 128k EPROM) in the same physical package.

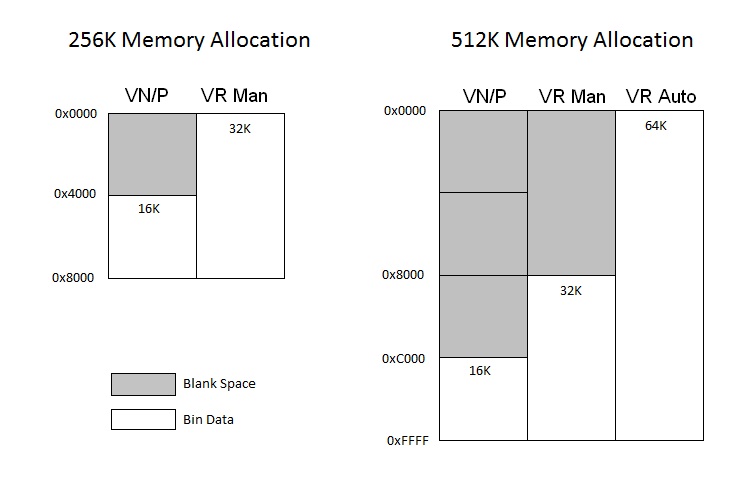
Bin Stacking Process:

Divide the Larger EPROM into Sections: Think of the 256k EPROM as two separate 128k sections stacked on top of each other.

Stacking the Bins: You "stack" the data for the 128k EPROM into one 128k section of the 256k EPROM. The remaining 128k section of the 256k EPROM can either be left empty or 2 copies of the Bin can be written in that space (there are mods that will allow you to run 2 different bins and switch between them).

Also Note, generally the 256/512K EPROM references are in *Kilobits* and the BIN sizes are in *Kilobytes*,

Therefore a 16K BIN file is full capacity of a 128K EPROM



Visual Representation of Bin Stacking