Odroid MC1 Guide

Docker Swarm
The most tedious part in setting up the ODROID-MC1 cluster is to install an OS and software packages needed for running and managing the docker-swarm on each compute node.
To expedite the process, you can download an SD card image with everything almost ready to use at https://oph.mdrjr.net/MrDreamBot/.
There are still a few steps you have to do to make everything work. The SD card has logins ‘root’ and ‘odroid’ already set up.
The password for both logins is “odroid:. The Swarm we are building consists of 1 master and 3 worker nodes.
https://magazine.odroid.com/article/odroid-mc1-docker-swarmgetting-started-guide/https://wiki.odroid.com/odroid-xu4/application_note/software/creating_build_farm

Build Farm
A compile farm is a server farm, a collection of one or more servers, which has been set up to compile computer programs remotely for various reasons. Here is an example guide to create your own build farm.
https://wiki.odroid.com/odroid-xu4/application_note/software/creating_build_farm

JAVA Parallel programming
An environment ready for experimenting with MPJ Express, a reference implementation of the mpiJava 1.2 API.
https://magazine.odroid.com/article/odroid-mc1-parallel-programming-getting-started/

Hadoop and Spark
Installing HADDOP and SPARK onto an ODROID-XU4 or MC1 cluster.
https://magazine.odroid.com/wp-content/uploads/ODROID-Magazine-201609.pdf#page=18

PXE remote booting setup
How to set the PXE environment (server and clients) using ODROID-XU4/HC1/MC1. Although the NFS is used for the root file system of PXE client in this page, the ramdisk is also useful if the image size of the root filesystem is compact.
https://wiki.odroid.com/odroid-xu4/application_note/software/pxe_boot

To set up the MC1 cluster, you need the following in addition to the MC1 hardware:

BASIC SETUP

1 x Gigabit switch with at least 5 ports
5 x Ethernet cables
4 x microSD cards (at least 8GB in capacity)
4 x 5V/4A power supply for the MC1 computers

INTERMEDIATE SETUP

1 x Gigabit switch with at least 5 ports
5 x Ethernet cables
4 x microSD cards (at least 8GB in capacity)
4 x DC Plug Cable Assembly 5.5mm for the MC1 computers
1 x 5V/20A power supply

ADVANCED SETUP

1 x Gigabit switch with at least 17 ports
17x Ethernet cables
16 x microSD cards (at least 8GB in capacity)
16 x DC Plug Cable Assembly 5.5mm for the MC1 computers
1 x 5V/60A power supply

Which power adaptor should I use?
We recommend 4pcs of 5V/4A adaptor. Inner diameter is 2.1mm, outer diameter is 5.5mm. Center is Positiver an Outer is Negative.

MC1x 4 units consume around 60~70Watt.