Non volatile RAM disk development.

Background

Non volatile RAM/ROM disk is required from typical automotive system. Previously, we could use some solutions such as pramfs, cramfs, romfs and etc...
On the other hand, each off tree file systems is stopped maintenances.

Requirements

- This filesystem supports standard linux filesystem feature.
- This filesystem supports read only and read/write.
- This filesystem supports XIP in read only case.
- This filesystem supports to checking mechanism for filesystem and data corruption.
- This filesystem supports to verification mechanism.
- This filesystem supports area setting with liner addressing.
- These requirement shall support by filesystem with ram/rom block device or filesystem without block device.

Point

These requirement are common requirement both instrument cluster (ex. fast boot up, persistence) and ivi (ex. backup manager part of base system).