Please find the datasheet of DMM IC in attachment, I also update the schematic with part annotations in attachment.

Here is the answers of your questions, Please comment,

1. The initial accuracy of the reference in IC can vary from 1.1V to 1.4V , typical 1.25V . As this variation is quite large, So it need a external VR to calibrate it, After calibration the VR will be sealed in the production line & no need to adjust by users.

2   Backlight design is optional, The DMM Ic has a build in backlight control mechanism, If BLCTR key be pressed for 2 second, the backlight will be on, It will auto off in 15 second if no press on the key. (See datasheet page 13, 13.4) You are right, It may need a extra key for backlight or it may be combined with the power switch.

3. The DMM IC has an auto power off feature itself, If no any action on keys, If will off in 15 minutes. (Page 13, 13.1) , In the other word, It is no a push on push off mechanism , but a push on auto off one.

4. R7 value, we can change it as you said.

5. The description of the accuracy and stability is not much in it's datasheet, but it have more technical details in the Chinese version , I am trying to get more details from vender and going to evaluate the chip by our self.

6. power consumption calculation be shown below:
   The figures are based on following assumptions

   6.1. The new circuit will consume less than 2mA current in active state.
   6.2 Each measurement (active state) last for 1 minute
   6.3 power consumption in standby state is 10uA
   6.4 The typical battery capacity of the AA alkaline, CR2032 is 2550mAh & 200mAh. (After 1 year of storage)
   6.5 No backlight option
Calculation:
   One year standby will consume
         10uA * 24 hour per day * 365 day per year = 87.6mAh
   Power consumption of single measurement is
         1 minute /60 *2mA = 0.033mAh
   The remaining capacity of the battery after one year standby is
      AA   Battery 2550-87.6 = 2462.4 mAh
      2032 Battery 200-87.6   = 112.4 mAh
   The operation times of the device after one year
      AA   2462.4 / 0.033 = 74618 cycles
      2032   112.3 / 0.033 = 3403 cycles
Best Regards,
Stephen Ng
22/05/04