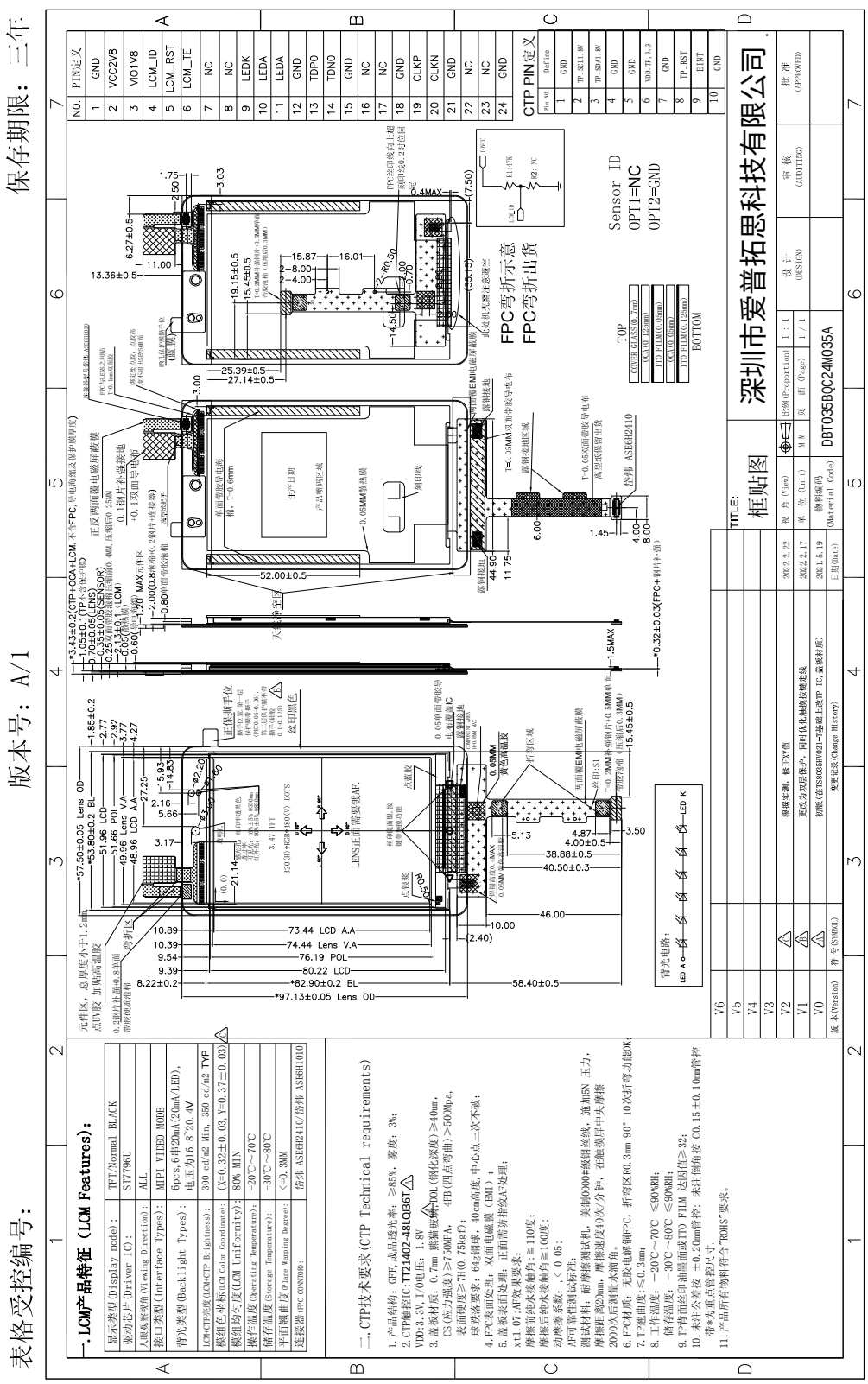2. MECHANICAL SPECIFICATION